Queen's University
Library

KINGSTON, ONTARIO

COLERIDGE
ON
LOGIC AND LEARNING

CABINET EDITION OF THE ENCYCLOPÆDIA METROPOLITANA.

PROSPECTUS.

JUST PUBLISHED, HANDSOMELY PRINTED IN CROWN OCTAVO,

COLERIDGE ON THE SCIENCE OF METHOD,

BEING PART I., PRICE ONE SHILLING,

(*To be continued in Weekly Parts and Monthly Volumes,*)

OF

A SECOND EDITION, REVISED AND CORRECTED

OF THE

ENCYCLOPÆDIA METROPOLITANA,

OR,

System of Universal Knowledge;

ON A METHODICAL PLAN,

PROJECTED BY SAMUEL TAYLOR COLERIDGE.

Φαίνεται ὄυτι πίρας, ὄυτι τιλεύτην ἐχων· ὅτι πρό τι τῆς ἀρχῆς ἄλλη ἀεὶ φάινεται ἀρχὴ· μετά τι τὴν τιλευτὴν ἑτέρα ὑπολειπομένη τιλευτή· τὰ μὲν ἐλλείπειν, τὰ δὲ πλεοναζειν, θρύπτεσθαι δὲ, οἶμαι, περματιζόμενον τὸ πᾶν ἀνάγκη· Οὐκοῦν δὴ φανῆναι καὶ ἀπτόμενα καὶ χωρὶς ἑαυτῶν, καὶ κινουμένα πάσας κινήσεις, καὶ ἑστῶτα πανταχῆ, καὶ γιγνόμενα καὶ ἀπολλύμενα καὶ μηδέτερα, εἰ ἑνὸς μὴ ὄντος πολλά ἐστιν; ΠΛΑΤΩΝ· Παρμενίδης.

"The strength of all sciences, which consisteth in their harmony, each supporting the other, is, as the strength of the old man's faggot, in the band. FOR WERE IT NOT BETTER FOR A MAN IN A FAIR ROOM TO SET UP ONE GREAT LIGHT, OR BRANCHING CANDLESTICK OF LIGHTS, THAN TO GO ABOUT WITH A SMALL WATCH CANDLE INTO EVERY CORNER?"

BACON. *Advancement of Learning*, Book I.

LONDON:

PUBLISHED BY JOHN JOSEPH GRIFFIN AND COMPANY,

53, BAKER STREET, PORTMAN SQUARE,

AND RICHARD GRIFFIN AND COMPANY, GLASGOW.

1849.

PROSPECTUS OF THE CABINET EDITION OF THE *Encyclopædia Metropolitana*. See p. 33.

FROM THE COPY IN THE LIBRARY OF UNIVERSITY COLLEGE, LONDON

COLERIDGE

ON

LOGIC AND LEARNING

WITH SELECTIONS FROM THE

UNPUBLISHED MANUSCRIPTS

BY

ALICE D. SNYDER

ASSOCIATE PROFESSOR OF ENGLISH

AT VASSAR COLLEGE

NEW HAVEN · YALE UNIVERSITY PRESS

LONDON · HUMPHREY MILFORD · OXFORD UNIVERSITY PRESS

1929

Dept. C6
cop. 2

COPYRIGHT 1929 BY YALE UNIVERSITY PRESS

PRINTED IN THE UNITED STATES OF AMERICA

THE PUBLICATION
OF THIS BOOK WAS MADE POSSIBLE
BY THE
LUCY MAYNARD SALMON FUND
FOR RESEARCH
ESTABLISHED AT VASSAR COLLEGE
JUNE 1926

118N2

PREFACE

PROBABLY few of the world's thinkers have left to posterity such masses of unpublished and, relatively speaking, unpublishable philosophical material as has Samuel Taylor Coleridge. In addition to the volumes of philosophical and theological remains that have been printed, there exist in almost unbelievable quantities manuscript notes for proposed works of vast scope, dictated sections of such works, marginalia. And, judging by the standard of Coleridge's prose at its best, one must admit that in the main they were left in a state far from readiness for publication. That was the pronounced verdict of Coleridge's literary executor, Joseph Henry Green, and appears to have been the silent verdict of more recent Coleridge students who have allowed the two volumes of an unfinished "Logic," together with numerous other philosophical fragments, to rest undisturbed in manuscript form in the British Museum.

I do not wish to reverse the verdict. I am sure, for example, that it would not redound either to the enlightenment of a twentieth-century public or to the credit of Coleridge to foist on the world in their entirety the masses of unorganized, unfocused material, much of it professing to be little more than an exposition—often a translation—of the *Critique of Pure Reason,* that make up the manuscript "Logic," Egerton 2825 and 2826.

The existence of such manuscript remains is, however, by no means discreditable to their author. As Miss Laura J. Wylie pointed out some years ago, writing of Coleridge's published prose, "His faults of method or manner, however great, were but the defects of a vital thinker passing into new realms and dealing with a mass of still largely inchoate ideas" (*Social Studies in English Literature,* p. 59). The manuscripts that, at the time of the author's death, had not been revised to the point of fitness for publication, manifest his faults of manner in an exaggerated form, but at the same time show an intense effort to think through to their farthest implications, theoretical and practical, ideas that were well worth the pains expended.

Nor does the fact that the manuscripts do not call for publication in full mean that they deserve the neglect that has been accorded them. They afford, for one thing, important materials for the student of Coleridge's theology. I have not attempted even to outline the work to be done in this field. What has interested me especially has been the material that bears on what Coleridge termed the art of reasoning, or logic in the very broadest sense of that word—and to Coleridge's way of thinking logic was inseparable from scientific

methodology and educational theory. As the result of an extensive study of manuscripts in the possession of the poet's great-grandson, as well as those in the British Museum and one important fragment now in the Henry E. Huntington Library, I have come to the conclusion that one early attempt at a treatise on logic should be published as it stands and that much of the remaining material on the subject should be made generally available through the publication of synopses and excerpts. A list of authors referred to in certain manuscripts promises, moreover, to be useful to students of Coleridge's literary and philosophical sources. I have appended to this preface a full table of the manuscripts consulted, noting which fragments I am publishing in full and which I am presenting by means of synopses and excerpts.

My own study of these manuscript materials has revealed some interesting facts about the sources on which Coleridge drew—facts which I have noted in the text. The publication of the excerpts which I have made may well reveal other such facts to students who bring to their reading a literary and philosophical background different from mine. My study has also resulted in a heightened sense of Coleridge's interest in logic, methodology, and education, and of his painstaking efforts to communicate this interest to others, and in a fresh recognition of the fertility of much of his thinking on these subjects. That it was a gratifying surprise to discover that he had done more actual writing for his announced works—so often called daydreams—than has ordinarily been assumed, goes without saying. I am offering some of these manuscript materials, with only a few biographical and interpretative chapters of my own, for what they may be worth to other Coleridge students.

In printing hitherto unpublished material my editorial policy has been as follows:

(1) Autograph S.T.C. manuscript material has been printed without alteration of phrasing, spelling, capitalization, or punctuation. Significant exceptions to this rule are clearly noted in the text.

(2) In the case of manuscripts written by an amanuensis or copyist, spelling, capitalization, and punctuation have been edited in the interests of uniformity and clarity.

(3) Greek phrases and quotations, whether written by Coleridge himself, or, as was often the case, by an amanuensis not well versed in the language, have been edited where necessary; i.e., breathings and accents have been added and occasional misspellings corrected. In this editorial work, as well as in the deciphering of Latin and Greek passages in manuscripts that were difficult to read, I have been assisted by Inez G. Scott of the Department of Latin of Vassar College.

(4) As all students of Coleridge's prose well know, certain of his favorite ideas and illustrations occur in almost identical form in several of his works. In the case of the manuscripts printed in this volume an attempt has been made to indicate such material, giving, in every case, a reference to at least one of the previously published works in which a similar passage occurs. There has been no attempt, however, at a comprehensive system of cross-references.

For assistance in making this study my thanks are due, first of all, to the Reverend Gerard H. B. Coleridge of Leatherhead, Surrey, who searched through his manuscript possessions and put at my disposal the philosophical material therein included, with permission to print such portions as I have selected. To him I am also indebted for the privilege of printing extracts from the Coleridge manuscripts now in the British Museum.

To the librarians of the British Museum, where most of my work was done, and also to those of University College, London, the Royal College of Surgeons, the South Kensington Museum, the Bristol City Library, the University of Leipzig, the University of Göttingen, Harvard University, the Henry E. Huntington Library, the Pierpont Morgan Library, and Vassar College, I wish to express thanks for especial assistance of many different kinds.

It is impossible to state in specific terms what I owe to each of the numerous critics of Coleridge who have considered the aspects of his thought in which I am interested. In studying a writer on whom the attention of so many scholars has been centered over a long period one's obligations to what has already been written must always be greater even than one is definitely aware. In the present case only a fairly comprehensive bibliography of Coleridge criticism could stand as an adequate list of acknowledgments due. To many scholars, moreover, I am indebted for prompt and helpful replies to frequent requests for information and advice. Here, again, the list would be large, but I wish especially to mention the late Lord Coleridge, John L. Haney, John Livingston Lowes, Marjorie L. Nicolson, Thomas M. Raysor, Frank T. Thompson, Mrs. Henry G. Watson (Lucy E. Gillman), and Thomas J. Wise. To Mr. Wise I also express my thanks for permission to peruse the Coleridge material in his Ashley Library.

I wish, finally, to record my deep gratitude to certain scholars who, during my years of undergraduate and graduate study, first aroused my interest in Coleridge and directed my early work in his literary criticism, Laura J. Wylie and the late Gertrude Buck of the faculty of Vassar College, and Fred Newton Scott of the University of Michigan.

A. D. S.

Poughkeepsie, N. Y.
June, 1929

TABLE OF MANUSCRIPTS AND EDITIONS

(Manuscripts previously unpublished that are here printed in full or in part; editions of prose works and letters referred to in the text.)

MANUSCRIPTS

MS A. The "Bristol Notebook," described in the text, pp. 50-54. In the possession of the Coleridge family. Contents, previously unpublished, printed here in full, pp. 53; 54-66; 139-152.

MSS B 1, B 2, B 3, B Supplementary. Notebooks and supplementary loose leaves, described in the text, pp. 8-9, materials for the unfinished "Opus Maximum." In the possession of the Coleridge family. Contents, unpublished, significant chiefly for a study of Coleridge's theological speculations. Excerpts bearing on the subject of the present investigation printed in the text, pp. 129-135.

B 1. Volume marked in pencil, probably by C. A. Ward, "Say Vol. I." Nearly 300 pages of manuscript. Pages unnumbered.

B 2. Volume marked "Say Vol. III." Approximately 120 pages of manuscript. Pages unnumbered.

B 3. Volume marked "Say Vol. II." It is, however, a continuation of B 2. Approximately 575 pages of manuscript. Pages unnumbered.

B Supplementary. Two sets of loose leaves found with the notebook materials for the "Opus Maximum." Approximately 40 pages of manuscript.

MS C. Autograph notebook containing miscellaneous entries made during the later years of Coleridge's life, beginning 1825. In the possession of the Coleridge family. Contents largely unpublished, though Gillman used the long autobiographical note for his Life. Entries bearing on the present study printed in the text, pp. 3-8; 135-138.

British Museum MS Egerton 2801. A volume of miscellaneous fragments and notes, largely unpublished, obtained by the Museum from Ernest Hartley Coleridge. Two fragments printed in the text, pp. 75-77; 153, note.

British Museum MSS Egerton 2825, 2826. The unpublished, uncompleted two-volume "Logic," described in the text, pp. 67-74. Full synopsis in the text, pp. 78-103; extracts, pp. 104-128; draft of autograph letter bound with the work, pp. 153-155; list of authors referred to in the manuscripts, pp. 155-157.

Manuscript annotations to works on logic.

(1) *Logic, or Rational Thoughts on the Powers of the Human*

Understanding. . . . Translated from the German of Baron Wolfius, London, 1770. British Museum collection of Coleridge marginalia, C. 43. b. 2. Autograph marginalia, previously unpublished, printed in full in Appendix C, pp. 158-162.

(2) Hegel, *Wissenschaft der Logik,* 1812 and 1816. British Museum collection of Coleridge marginalia, C. 43. A. 15. Autograph marginalia, previously unpublished, printed in full in the text, pp. 162-165.

EDITIONS OF PROSE WORKS

Aids to Reflection.

First edition, London, 1825.

Second American edition, Preliminary Essay by J. McVickar, New York, 1839.

Fifth edition, ed. Henry Nelson Coleridge, London, 1843. 2 vols.

Anima Poetæ.

First edition, ed. E. H. Coleridge, London, 1895.

Biographia Literaria.

First edition, London, 1817. 2 vols. in 1.

Second edition, ed. Henry Nelson Coleridge and Sarah Coleridge, London, 1847. 2 vols. in 3.

Confessions of an Inquiring Spirit.

First edition, ed. Henry Nelson Coleridge, London, 1840.

The Friend.

First edition, Penrith, 1809-1810.

Second edition, London, 1818. 3 vols.

Third edition, ed. Henry Nelson Coleridge, London, 1837. 3 vols.

Hints Towards the Formation of a More Comprehensive Theory of Life.

First edition, ed. Seth B. Watson, London, 1848.

Literary Remains.

First edition, ed. Henry Nelson Coleridge, London, 1836-1839. 4 vols.

Monologues (No. 1, "Life"; No. 2, "The Science and System of Logic"). *Fraser's Magazine,* November and December, 1835 (XII, 493-496; 619-629).

Notes on English Divines.

First edition, ed. Derwent Coleridge, London, 1853. 2 vols.

Notes, Theological, Political, and Miscellaneous.

First edition, ed. Derwent Coleridge, London, 1853.

A Preliminary Treatise on Method (General Introduction to the *Encyclopædia Metropolitana*).

Third edition (Cabinet edition of the *Encyclopædia*), London, 1849.

Specimens of the Table Talk of the Late Samuel Taylor Coleridge. First edition, London, 1835. 2 vols.

The Statesman's Manual . . . or a Lay Sermon, Addressed to the Higher Classes of Society. First edition, London, 1816.

EDITIONS OF LETTERS

Allsop, Thomas. *Letters, Conversations, and Recollections.* London, 1836. 2 vols.

Coleridge, Ernest Hartley. *Letters of Samuel Taylor Coleridge,* London, 1895. 2 vols., consecutively paged.

Cottle, Joseph. *Early Recollections, London,* 1837. 2 vols. Letters *passim.*

——. *Reminiscences of Samuel Taylor Coleridge and Robert Southey,* London, 1847. Letters *passim.*

Stuart, Mary. *Letters from the Lake Poets . . . to Daniel Stuart,* privately printed, London, 1889.

Towle, G. M. "Some Unpublished Letters of Samuel Taylor Coleridge," *Lippincott's Magazine,* June, 1874 (XIII, 697-710).

Turnbull, A. *Biographia Epistolaris,* London, 1911. 2 vols.

CONTENTS

INTRODUCTION: "LOGICIAN, METAPHYSICIAN, BARD"

The Unwritten Epic 1
The Thinker and His Art 11

THE POTENTIAL SCIENTIST

Medical Controversies and the *Theory of Life* 16
The Method of Science: Coleridge and Davy 23

ENCYCLOPEDIST AND EDUCATOR

The *Encyclopædia Metropolitana* 33
Academic Curricula 40
The Art of Teaching 44

THE LOGICIAN

The Early Attempt at an Organum 50
The "Sound Discretion" of Joseph Henry Green 66
The Argument of the "Logic" 75

"LOGOI"

From the "Logic"

Aristotle's Invention of Logic 104
Watts and Condillac on Logic 104
The Education of Nature 105
The Study of Grammar 105
Fables 106
History and Poetry 106
Learning and Wisdom 107
The Reasoning Process 108
Rules and Principles in Criticism 110
The Intuitive Imagination 111
Negation 112
The Criteria of Truth Relative to Communication 113
Defence of the Schoolmen 114
Words 114
The Art of Perception 116
The Platonic Dialectic 119
"Transcendent" and "Transcendental" 119

Parenthesis on Kant as the Inventor of Transcendental Analysis 120
The Eclipse of Philosophy 121
Leibnitz and Clarke on Space 121
Intuitions in Space 121
Hume, Bacon, Beddoes 123
Hume and his Opponents 124
Kant 124
The Distinction between Analytic and Synthetic Judgments 125
Imagery, Evidence, and Certainty 125
Trichotomy 126
Words and Images 126

From the "Opus Maximum"
The Child's Arithmetic 127
The National Schools 127
Atomism and Philosophy 128
Grammar and Logic 128
Scientific Assumptions 128
Dichotomy 128
On Proving the Existence of Man's Will 129
Mechanism 130
The Formal Sciences and the Platonic Dialectic 131
Synonyms 132
Motives 132
The Discovery of Truth 133
Probability as Evidence 134

From an Autograph Notebook
Syllogistic Logic 135
Ideas 135
History 137
Language 138
Reading 138

APPENDICES
A. The "Bristol Notebook" 139
B. Supplementary to the "Logic" 153
C. S.T.C. Marginalia in Volumes on Logic 158

ILLUSTRATIONS

Prospectus of the Cabinet Edition of the *Encyclopædia Metropolitana*, *Frontispiece*
From the copy in the library of University College, London.

A Page from the "Opus Maximum," in Green's handwriting, with Coleridge's own annotation (on the left), *Facing page 9*

A Page from the "Bristol Notebook," written in part by an amanuensis and in part by Coleridge himself (ll. 12-22), *Facing page 53*

Coleridge's Announcement of his Philosophic Class, *Facing page 71*
From the London *Courier*, February 25, 1822.

A Section of the Autograph Outline of a History of the Art of Reasoning, *Facing page 75*
From the British Museum MS Egerton 2801.

INTRODUCTORY

"LOGICIAN, METAPHYSICIAN, BARD"

You are going not indeed in search of the New World, like Columbus and his adventurers, nor yet an *other* World, that is to come, but in search of the other World that *now is,* and ever has been tho' undreamt of by the Many, and by the greater part even of the Few, who have found it marked down in ancient charts or have had it reported to them by pretended re-discoverers of their own times, discredited as a Dream.

COLERIDGE, Manuscript Fragment (See Appendix B, pp. 153-154).

His speculations are all fragmentary, fractional parts as it were, of some great unity ever brooding in his teeming mind, but never sufficiently developed to be connectedly brought forth. The fulfilment however of such virtual promise . . . is well known to have occupied for many years much of his thoughts, being often alluded to in his writings, as in the present, where he terms it, "the principal labor of my life since manhood;" still more frequently and openly promised to his enquiring friends, and the hope of its completion, never finally abandoned by himself or despaired of by others, up to the very day of his death.

JOHN MCVICKAR, Preliminary Essay to *Aids to Reflection,* 1839.

THE UNWRITTEN EPIC

THERE is a striking similarity between the plan of work Coleridge once mapped out as desirable preparation for the writing of an epic poem and the course of study he was wont to propose for the education of young men about to enter any of the learned professions:

I should not think of devoting less than twenty years to an epic poem [he wrote Cottle in a letter that has won for itself some notoriety]. Ten years to collect materials and warm my mind with universal science. I would be a tolerable Mathematician. I would thoroughly understand Mechanics; Hydrostatics; Optics, and Astronomy; Botany; Metallurgy; Fossilism; Chemistry; Geology; Anatomy; Medicine; then the mind of man; then the minds of men, in all Travels, Voyages, and Histories. So I would spend ten years; the next five in the composition of the poem, and the five last in the correction of it.[1]

The same year he was writing to the father of his housemate and pupil, Charles Lloyd:

[1] Cottle, *Reminiscences,* pp. 102-103.

While your Son remains with me, he will, of course, be acquiring that knowledge and those powers of Intellect which are necessary as the *foundation* of excellence in all professions, rather than the immediate science of *any*. *Languages* will engross one or two hours in every day: the *elements* of Chemistry, Geometry, Mechanics, and Optics the remaining hours of study. After tolerable proficiency in these we shall proceed to the study of *Man* and of *Men*—I mean, Metaphysics and History—and finally, to a thorough examination of the Jewish and Christian Dispensations, their doctrines and evidences: an examination necessary for all men, but peculiarly so to your son, if he be destined for a medical man.[2]

The parallel suggests one of the many possible answers to the perennial query as to why Coleridge never wrote a great philosophical epic.[3] His whole life was such a preparation for it as he had mapped out. Allusions in his completed works, and more especially his marginal annotations to the books he read, show that his studies in all fields, from mechanics to mysticism, were carried on in the spirit of an epic adventure, as a search for that "other World that *now is*, and ever has been tho' undreamt of by the Many." But Coleridge held that the spirit of his own intellectual activities, with their imaginative penetration and their cosmic comprehensiveness, was no other than the spirit that should animate all thinking, toward whatever ends it was directed. And time and again his energies were absorbed by the task of starting his friends and readers off on some intellectual journey of their own instead of giving them in imaginative form the precipitated results of his own experiences. Not simply his discoveries, but the adventures of discovering must be shared. That Lamb's "bard" was lost in the "metaphysician" is a theory so well substantiated that it has acquired something of the weight of fact; that the "bard" and to some extent the "metaphysician" as well, were lost in the teacher and "logician" is a fraction of the truth sometimes forgotten. Pecuniary considerations were not without bearing on the matter, but fundamentally, and apart from questions of a livelihood, Cole-

[2] Turnbull, I, 107 ff. Cf. Coleridge's curriculum for his proposed school, given below, pp. 40-41.

[3] One of the most interesting discussions of this question will be found in J. Middleton Murry's article, "The Metaphysic of Poetry," *Hibbert Journal*, XXV (July, 1927), 610-622.

ridge was a teacher, eager to inspire thought and to communicate an art of thinking.

An examination of fragmentary manuscript remains, the publication of which was once a matter of serious contention between Coleridge's literary executor, Joseph Henry Green, and C. Mansfield Ingleby,[4] makes it evident that, as a matter of fact, Coleridge came much nearer to writing a prose epic than has ordinarily been assumed, but also that he was much more of a teacher and logician than the present century at least has commonly considered him.

An autograph notebook begun in 1825 contains a synopsis of his metaphysical system that more nearly approaches the epic in the quality of its conception than do any of his published prose writings. It is a curious document, of special value today, perhaps, as a revelation of the author's interests and intentions, but for several reasons it deserves publication.[5] It reads as follows:

May 24, 1828. It may be well to place on record the Synopsis of the Coleridgian (*Mem.* more euphonious it will be to name it the Ēstēsĕān, or Esstĕcēan) Methodology, or Philosophy of Epochs and Methods, by S.T.C., R.A. R.S.L. &c. &c.

> Author of Tomes, whereof, tho' not in Dutch,
> The Public little knows, the Publisher too much.

or rather of its principal Divisions.

PART I

Division the First—*Stasis.*

Commences with the Absolute Actuality, essentially causative of all Reality—2. The Tetractys, and Tri-unity—3. The Pleroma. 4. The Eternal Possibilities, which the Supreme *Good* demands as possible but forbids to be willed as actual.

Division the Second, *Apostasis.*

1. The Will to actualize the eternal possibility. 2. The inevitable

[4] Cf. *Notes and Queries,* July 9, 1853 (1st series, VIII, 43), and May 27 and June 10, 1854 (IX, 496-497 and 543-544).

[5] MS C, pp. 132-142. A very meager account of the "system" was given in Coleridge's letter to Sterling, October 30, 1833 (*Letters,* 1895, pp. 771 ff.). The detailed synopsis here printed may prove of value to students interested in Coleridge's relations to Böhme and other mystics.

Consequence—or the Apostasy, mythically the Fall of the Angels. Chaos.

Division the Third

1. The divine Condescension—Scheme of Redemption—to what extent possible, i.e. compatible with the Absolute Will, Holiness, Word and Wisdom—

PART THE SECOND

Division 1.

Birth of Time and Nature by the Polarization of the Chaos,—Commences with the most perfect Contrary of the Absolute Act, that is at all predicable, or concerning which aught can be predicated.—

Division Second.

Polar Forces.

Division Third.

Hints toward & hasty Sketch as in a Vision of the Forms of Nature as inorganic.

Division Fourth.

Vegetable Life.

Division Fifth.

Arguments for the possibility of the Mosaic intervention of the Helioplanetic or Centro-peripherical Formation between the manifestition of Vegetable, and the Birth of Animal Life—Anticipations of a New Science, viz. philosophic Astrology, or Chemic Céleste—bearing a similar Relation to the Newtonian Astronomy as Chemistry to Mechanics.

Remaining Divisions.

Animal Life from the Polyp to the primæval Man—Ends with the physiological & the rational Grounds for the Assumption, that Man is not in the state, in which the original Family must have been both constituted and circumstanced: or a Fall of Man shewn to be a necessary Postulate of Science, I, on grounds of Pure Reason, i.e. by deduction a jam demonstratis in Parte Prima hujus Methodologiæ and from the finality, or common final Cause implied in the Law and Order of Ascent of Nature inorganic or organic, as *sketched in Outline* in Part the Second: II, on theoretical Grounds, or as the only

Hypothesis adequate to the Solution of the existing Circumstances. —The exhibition however of this IInd Ground is deferred to the *third Part* or (probably) the fourth Volume of the Methodology: because tho' capable of proof independent of positive Revelation and History, it will be presented in a stronger light of evidence and more convincingly for the General Reader as well as more easily to be understood, in combination with them.

P.S. This Second Part comprizes the prior half of the Exposition of the Idea, first enunciated in the Estecëan Philosophy, that Life begins in detachment from Nature and ends in unition with God:— and as the First or Ideal Part concludes with the Fall of Angels (Τῶν Λόγων ἢ Ἀριθμῶν, καὶ Δυνάμεων) so the Second Part (which, I trust, will have an equal right to be named the J a h a g ë an, as the Estecëan System (J.H.G.—Jäaitchgëan too cacophonous Ya h a h, the Ya pronounced as the last syllable in *mama*) concludes with the *Fall of Man.*

PART THIRD

Introduction AA

Proof *a priori* of *a* Revelation—(n.b. this already given in and to be transcribed from the Gillmano-recipe or Pharmacopœian Memorandum Book.) & that Religion *implies* Revelation or Religion and Revelation are synonymous Terms and Revealed Religion a Pleonasm. . . .

BB *or Second Chapter* of the Introduction to the Third Part.

The superior Authority and Historical Reliability of the Hebrew Origines Gentium, or earliest History contained in the Mosaic Writings, proved by their exclusive coincidence with the principal canons of Historic Credibility. . . .

Section the first

The Fall of Man, in connection with Revelation, and, in relation to the Anastasis or Redemtivial Scheme (Here the views contained in my Mem Books, & in the Jahagéan Ult. et Penult.) . . . An attempt to establish a philosophical & religious Supra-Copernican [?] view of the Fall.

Section 2nd.

Of the two first Relations of the Redeemer to our first Parents, as comprehending the Individual and the Kind. . . .

3rd

Probable final Cause of the existence and catastrophe of the Antediluvians.

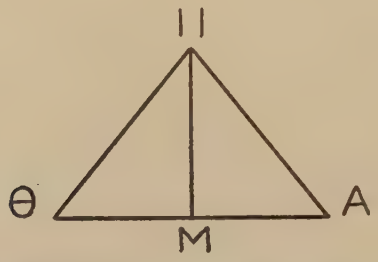
Section Fourth.

Noah and his three Sons. Third Relation of the Saviour—or the Redemption relatively to the Race. . . .

Section 4.

Jahagean Ult et Penult with great augmentations—as filling the interspace from Noah to the Building of Babel. . . .

P.S. Here I end the third Part or integer which in harmony with both the former closes with a Fall or Apostasy . . . the apostasy of the Families of the Earth from the Setho-Noetic Faith and Worship. . . . Had there occurred no Apostasy of the Tribes and Families, the Scheme would have stood thus



Π or Prothesis Noah—of which the Base Line is to be regarded as the Production—θ the Thesis, or + Pole [and so on through masses of detail here omitted].

PART THE FOURTH

Commences with the exposition of the two-fold Name and Office of the Eternal Son, for which Preparation has been made in Part the First—namely as 1. the Jehovah-Person, the revealed Word, the Author and the Object of the saving Faith: Lux actualis and secundum:—2. as the Providence of the World, the energic Sphere of Reason (Lux, Lex et Pulchritudo Rerum) and Ground . . . of (the *normal*) Humanity—Lumen potentiale in omnibus—and briefly and generally applies this principle to the consideration of the Races relatively to the Goodness of God and the Redemption of Men as before in relation to the Depravity of Man. . . .

The second Half of the Fourth Part, or rather perhaps the Second

Tertia . . . goes back to Egypt and traces the course of Paganism, Greek Art, Science, Philosophy & Roman Realization and Fixture of Greek Ideas, with the History of the Jews from Ezra to John the Baptist—comprizing the substance of my Course of Lectures on the History of Philosophy—shewing the completion of the Cycle of Philosophy just before the Coming of Christ—Then, the Origin of the conversion of the Idea of the Redeemer into the expectation of a Messiah.—

The Incarnation of the Logos in Jesus—the character and purpose of the Morals of the Gospel and the specific Object of the brief Mission of Jesus, as the Elias (See the Day-books) The Miracles of Christ—the two-fold Essence of his Death, Resurrection and Ascension into Glory—the commencement of the invisible Church, and the exposition in full of the whole Scheme of Christian Faith in all it's articles, whether as everlasting Truth or as progressive realization—in short, the Revelation of the Eternal in Time, with the gradual thinning, defecation and final transparency of the Medium, with the restoration of the Pleroma by the perfection of the personality as the Distinctity and the Union with God, in through and with the Son of God & the Divine Humanity as the Unity—Eternal Life and that last profoundest Mystery and Triumph of Love and Goodness, Eternal Death as the Pledge of it's immutability—these are the Contents of this, the completing Division of the Fourth Part.

THE FIFTH PART

Takes up the inquiry (already instituted by me in my Eight Letters on the right and the superstitious Estimation of the Scriptures) whether the infallibility &c of the Jewish & Christian Canons is or ought to be an additional & distinct Article of Faith—and examines each book in succession—In short, it will be, I trust, a compleat Substitute for the German Introduction to the Old & New Testaments—This Part is critical throughout & includes various strictures on the Translation. It will [be] a real History of the Bible —not a flat new-wording of the Bible History—the great Object to restore the Bible to it's due place in the Love & Veneration of Christians by at once establishing it's Homopneumaty yet asserting it's Humanities. . . .

THE SIXTH AND LAST PART

Gives the Philosophy, and a philosophic Abstract, of the History of the Visible Church & of Christendom from the Apostles to the present times—and ends with a view of the Church of England

as an Estate of the Realm (—λησία)[6] and the two-fold Function of it's Ministers, as Preachers & Members of the Church of Christ (ἐκκλησία) and as Trustees & Functionaries of the States—with the equal and opposite Evils of Confounding and of dividing the Functions—Closes with an Exhortation to the Clergy and a solemn Appeal to the (orthodox) Dissenters.—

If the completion of this Great Work, the main Labor of my Life, would be to the Glory of God in the advancement of the Truth in Christ, may God grant me Space and Grace to write Finis on it's last Leaf.

S. T. Coleridge

Grove, Highgate 27 May 1828

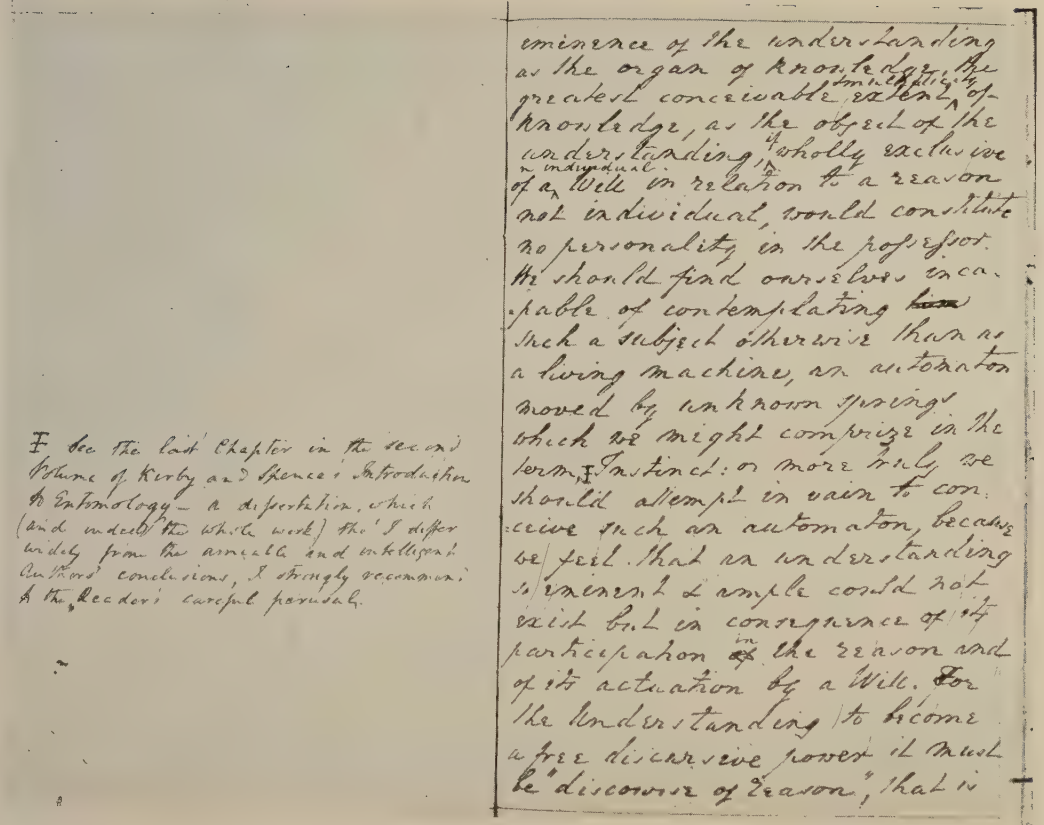
Here we have an elaborate account of Coleridge's "Opus Maximum" as he conceived it in the year 1828, his "Assertion of Religion" or "Logosophia"—for the title, and the proposed contents as well, varied somewhat from time to time.[7] It is the work that he was planning before his first visit to Germany, and was engaged on up to the time of his death. It is the work that Green described[8] as an "attempt to construct the world *a priori*," a "philosophical Cosmogony" that, he feared, hardly corresponded to the "requirements of modern science," and would be found unintelligible in the fragmentary state in which it was left. Manuscript materials for portions of the work still exist.[9] In the possession of the Coleridge family are three vel-

[6] Reading uncertain.

[7] The following are the more important references to the "Opus Maximum" to be found in Coleridge's printed works: Letter to J. Wedgwood, May 21, 1799 (Turnbull, I, 178 ff.); Letter to Godwin, June 4, 1803 (*ibid.*, I, 270 ff.); Letter to Godwin, July 10. 1803 (*ibid.*, I, 275 ff.); Letter to Cottle, 1807 (Gillman, pp. 225 ff.); "Essay on . . . Criticism," 1814 (Cottle, *Early Recollections,* II, 218); Letter to Stuart, September 12, 1814 (*Letters,* 1895, pp. 627 ff.); Letter to Cottle, March 7, 1815 (Cottle, *Reminiscences,* pp. 386 ff.); Letter to Stuart, October 7, 1815 (*Lake Poets,* pp. 242 ff.); *Biographia Literaria,* 1817 (I, 133, 263, 267, note); Letter to Allsop, November 27, 1820 (Allsop, I, 140 ff.); Letter to Allsop, January, 1821 (*ibid.,* I, 145 ff.); Letter to Allsop, September 24, 1821 (*ibid.,* II, 8 ff.); Letter to Stuart, March, 1822 (*Lake Poets,* pp. 281 ff.); Letter to Allsop, December 26, 1822 (Allsop, II, 150 ff.); Letter to Wordsworth, 1824 (*Letters,* 1895, pp. 733-734); *Aids to Reflection,* 1825 (174 note); Letter to Stuart, October 14, 1828 (*Lake Poets,* pp. 314 ff.); Letter to Poole, 1830 (*Letters,* 1895, p. 753); *Table Talk,* September 12, 1831 (II, 1-3); Letter to Sterling, October 30, 1833 (*Letters,* 1895, pp. 771 ff.); *Table Talk,* July 10, 1834 (II, 341-342).

[8] See C. Mansfield Ingleby, "On the Unpublished Manuscripts," *Transactions of the R. S. L.,* 2d series, IX, Part I, and Green's communication in *Notes and Queries,* 1st series, IX, 543-544.

[9] Cf. *Letters,* 1895, p. 652, note.



eminence of the understanding as the organ of knowledge, the greatest conceivable extent of knowledge, as the object of the understanding, wholly exclusive of a Will in relation to a reason not individual, would constitute no personality in the possessor. We should find ourselves incapable of contemplating such a subject otherwise than as a living machine, an automaton moved by unknown springs which we might comprize in the term, Instinct: or more truly we should attempt in vain to conceive such an automaton, because we fail. That an understanding so eminent & ample could not exist but in consequence of its participation in the reason and of its actuation by a Will. For the Understanding to become a free discursive power it must be "discourse of Reason", that is

I See the last Chapter in the second Volume of Kirby and Spence's Introduction to Entomology — a dissertation, which (and indeed the whole work) tho' I differ widely from the amiable and intelligent Authors' conclusions, I strongly recommend to the Reader's careful perusal.

A PAGE FROM THE "OPUS MAXIMUM," IN GREEN'S HANDWRITING, WITH COLERIDGE'S OWN ANNOTATION (ON THE LEFT)

lum-covered notebooks, together with a number of loose leaves, that are clearly parts of the outlined "Opus." They are written chiefly in Green's hand, but contain passages by some other amanuensis, probably Gillman, and occasional autograph corrections and additions by Coleridge himself; the watermarks run from 1815 to 1820.[10] The relation of the notebooks to the synopsis of 1828 is indicated by the contents as a whole and by such key passages as the following:

> The object of this work consists in the assertion, first: of religion as implying revelation. . . .[11]
>
> Our first division which we have entitled Stasis, and elsewhere the Plenitude, is both [historic and scientific] eminenter. . . . The second i.e. the Apostasis is for us purely historic. . . .[12]
>
> We will conclude this the fourth great division of our anastatic process, the metastasis or transition of chaos into ether being taken as the first, by a distinct recapitulation and specification of the powers hitherto evolved in the order of their birth and epiphany.[13]

The results of Coleridge's studies of man and nature did, then, go far toward formulating themselves as narrative, as the story rather than the theory of a world where, in the manifestations of the Divine Logos, thought and action were one. An attempt to postulate a reality that should harmonize the accepted truths of science and religion issued in the beginnings of a significant imaginative achievement.

But in the actual detail of composition the theorist dominated rather than the poet; the existing fragments read like portions of a theological and cosmological dissertation rather than even a prose epic. And the introduction to the "Opus Maximum" was to consist of a long educational treatise on logic! The manuscript materials for the work, as well as Coleridge's published allusions to it, contain references to this introductory "Logic." In a letter that Coleridge wrote only the year before his death to John Sterling stands the following typical piece of evidence:

> Many a fond dream have I amused myself with, of your residing

[10] A lost fragment of this work, some hundred and fifty pages on "The Divine Ideas," in the handwriting of J. H. Green, has recently been located in the Henry E. Huntington Library.

[11] MS B 2.

[12] MS B Supplementary, p. 19.

[13] MS B 1.

near me or in the same house, and of preparing, with your and Mr. Green's assistance, my whole system for the press, as far as it exists in writing in any *systematic* form; that is, beginning with the Propyleum, On the Power and Use of Words, comprising Logic, as the canons of *Conclusion,* as the criterion of *Premises,* and lastly as the discipline and evolution of Ideas (and then the Methodus et Epochee, or the Disquisition on God, Nature and Man). . . .[14]

This tripartite introduction was partially developed in connection with one of Coleridge's ventures in informal teaching,[15] and, woefully unfinished as it is, came a little nearer completion, apparently, than the "Opus" proper. There is some reason to think that Coleridge's literary executor planned to publish the "Logic"[16] even after he had decided that the fragments of the work it was to introduce would have to be entirely rewritten if they were to be given to the public.[17] For valid reasons the plan was abandoned, but the manuscript of the introduction stands, a remarkable memento of Coleridge's lifelong interest in what he called logic and of the tremendous importance he assigned to its study. The inadequacy of the ordinary syllogistic logic, either as an "instrument of real life" for the discovery of scientific truth, or as a medium of metaphysical reasoning, was hinted at in Coleridge's first attempt at a logical organum,[18] and is the recurrent theme of this later "Logic" as well as of his published essays on method and the relation of Bacon to Plato. The logical manuscripts show him striving by every means at his command, and especially through an exposition of Kant's critical philosophy, to communicate his conviction on this point, with some hints of its manifold implications.

Among the reasons for attaching such an introduction to such a work are some that would lead to remote theological considerations, if anything can be called remote when Coleridge's ways of thought are in question. As Coleridge saw things, there was an essential relationship between the manifestations of the Divine Logos and the Polar Logic by means of which he tried to image the processes of human thought. But, metaphysics aside, the fact was that he could not hope to

[14] *Letters,* 1895, pp. 771 ff.
[15] See below, p. 71.
[16] Egerton 2825, 2826.
[17] See below, pp. 66-67.
[18] MS A.

convey his conclusions on any subject, much less share the joys of achieving such conclusions, unless he could inculcate and justify what he considered sounder and more dynamic methods of thinking than those that seemed to him to prevail. Hence, many of his most suggestive informal notes on mental processes, and, hence, his struggles to produce something in the way of a comprehensive art of reasoning.

THE THINKER AND HIS ART

In a sense it is fair to say that it mattered little to Coleridge what he thought about. His published and unpublished works alike witness the fact that his interest in logic or the art of thinking was stimulated and kept at a high pitch by his desire to convince his age of theological and metaphysical truths that to him mattered tremendously; of this there can be no question. But on the other hand, no one who has read his less formal writings, such as the notes and comments collected in *Anima Poetæ,* for instance, can question the fact that he took keen delight in the process of thinking, irrespective of the end toward which it was directed. The parentheses within parentheses of his prose style,[19] especially in material that had not been pruned to the point of fitness for publication, show an alertness to intellectual implications that often thwarted the forward march of his thought, but gave to each stage of the process a significance that the uninitiated could not suspect. To individual words and phrases he attached an almost supernatural value. People sometimes tired of his habit of repeating certain ideas in his lectures,[20] but to Coleridge himself an "Idea" was characterized by unlimited fertility, and each new implication that suggested itself, each new perspective it afforded, gave him a new thrill of discovery.

> To contemplate the Ancient of Days with feelings new as if they *then* sprang forth at His own Fiat—this marks the mind that feels the riddle of the world and may help to unravel it. . . . What is it that I employ my metaphysics on? To perplex our clearest notions and living moral instincts? . . . No . . . to support all old and venerable truths, to support, to kindle, to project, to make the reason

[19] Cf. *Letters,* 1895, p. 551.
[20] Cf. H. Crabb Robinson, *Blake, Coleridge, Lamb,* ed. Morley, 1922, p. 115.

spread light over our feelings, to make our feelings diffuse vital warmth through our reason—these are my objects and these my subjects.[21]

In the processes of the understanding he found that it was the shortest way that best gave him knowledge—"but the longest makes me more *knowing*."[22] It was Coleridge's concern for himself and for others that they should have knowledge of the truth, but his even greater concern that they should have the experience of knowing.

So it was that a large part of Coleridge's educational work consisted in distinguishing, by one means or another, between thinking that was dynamic, imaginative, and fertile, and the relatively passive thing that often went by its name. He tried method after method of bringing the distinction home, contrasting now *thought* with mere *attention,* now the *imagination* with the *fancy,* and again, and more frequently, the *reason* with the *understanding*. For the experience of knowing involved, Coleridge insisted, the "total man," not simply the "understanding." He found that ordinary thinking fell far short of adequacy because it was based on uncriticized premises and assumptions, and determined by often unrecognized bias. The processes with which ordinary formal logic dealt were futile unless supplemented by what he called "mental initiative"[23] when he thought the word "idea" would be misunderstood, and by the enlightenment that came through true experience in the world of nature. The thinking that counted involved the will to postulate premises instead of merely taking them for granted; it involved the power to perceive afresh the materials of thought, instead of accepting them passively as ready-made materials for intellectual manipulation. It was a physical experience, conditioned largely by "feeling" and attitude. There are indications that Coleridge's own sensitiveness to motor and kinaesthetic imagery was well above the average, and this fact helped him to an insight into mental processes that was not common in his day. "I hold that association depends in a much greater degree on the recurrence of resembling states of feeling than on trains of ideas," he wrote Southey in 1803,[24] and

[21] *Anima Poetæ,* pp. 41-43. [22] *Ibid.,* p. 173.
[23] Cf. *The Friend,* 1818, Vol. III, Essay 8. (Subsequent editions, 9).
[24] *Letters,* 1895, pp. 427 ff.

both his printed and his manuscript notes on dreams show him groping eagerly for a physiological theory of mental imagery.

Probably this distinction came as near as anything else to constituting Coleridge's philosophical "system." He hinted as much himself time and again. Reduced to positive, formal statement, it is relatively arid, and, moreover, justifies the query as to whether it contained anything new[25] or even deserved to be called a philosophy. But Turnbull has replied to the critics who complain that Coleridge had no philosophy, "One of the features of Coleridge is that he was never without a Philosophy, and could not speak without betraying the fact that he judged all things from a standpoint which was the centre of a large planetary system of dependent and interdependent ideas."[26] It could scarcely be better put. The unifying element in Coleridge's thought, which critics are bound to recognize in spite of verbal inconsistencies and contradictions, is a "standpoint" rather than a "system." This standpoint expressed itself better informally than formally,[27] and better negatively than positively—and in this it proved itself a true "Idea" in Coleridge's sense of the word.[28] His formal attempt to schematize the dialectic movement of the reason—his favorite "Pentad"—has proved hardly as fruitful as he hoped;[29] but in the course of his negative criticisms of the lower faculty, the understanding, he threw out informal suggestions for which thinkers today are still expressing their gratitude. The negative doctrine of Kant's *Critique of Pure Reason* was what Coleridge valued most highly in that work—the stress it laid, not on the powers of the reason, but on the limitations of the understanding, which was to be considered as the faculty of means, not ends. And it may be that one secret of Coleridge's own in-

[25] Investigations of Coleridge's relations to other philosophers are still going on apace. Cf. C. Howard, *Coleridge's Idealism,* 1924; F. W. Stokoe, *German Influence on the English Romantic Movement,* 1926; A. E. Powell (Dodds), *The Romantic Theory of Poetry,* 1926; and the modern language and philosophical journals *passim.*

[26] Turnbull, II, 146.

[27] On this, see John Stuart Mill's essay, *Coleridge,* 1840.

[28] See below, pp. 135-137.

[29] This is not to disparage the concrete applications, made by Coleridge and later critics, of the principle of reconciliation of opposites best known in the form of the Hegelian dialectic. I have discussed Coleridge's use of this principle in some detail in a study published at Ann Arbor in 1918 (No. IX of "Contributions to Rhetorical Theory" edited by Prof. F. N. Scott).

fluence on educators and logicians during the middle of the nineteenth century lay in the sense of freedom and potential control that he conveyed indirectly, by relegating the concepts of the understanding to the order of tools, shaped by and subservient to powers that more adequately expressed the "total man."

With a philosophy that can best be described as a "standpoint," and a theory or art of reasoning that assigned prime importance to such intangible factors as feeling and attitude, it is not strange that Coleridge has been called unscientific as well as unphilosophical. No complete refutation of the charge is possible. The excitement that he derived from thinking out the limitless implications of an idea was such that he must have found the ordinary processes of disinterested verification tedious, and he sometimes shirked them. One may argue, of course, that even if his own ways of thinking left something to be desired from the scientific point of view, his contributions to the psychology of thinking, based largely on introspective analysis, were for that reason none the less valuable; they were, it may be, the contributions of the abnormal psychologist, who calls attention through the exaggeration that characterizes pathological instances, to aspects of normal processes that are too often overlooked. But that is not the whole story. Coleridge's scientific studies, amateurish as they were, show that he paid more attention to objective verification than he is usually given credit for; and as for his theoretical art of reasoning, in it, scientific and strictly logical thinking was an essential. Conformity to the laws of the understanding, though not a sufficient, was yet a necessary test of truth.[30]

Strange as it seems when one tries to follow Coleridge through the intricacies of developing an idea, his aim was realism.[31] Many of his most fantastic theological and cosmological speculations were attempts to reconcile scientifically conceptions that were held by the less thoughtful as absolute realities in spite of the fact that they contradicted each other

[30] See below, pp. 86-87.

[31] An unpublished note on a flyleaf of Tennemann's *Geschichte der Philosophie,* British Museum C. 43. c, reads: "Indeed, it is by rebuilding the Doctrine of Realism on sure foundations that I hope to effect what Raymond of Sabunde so nobly attempted."

flatly. With the aid of philosophers and scientists of many different schools he devoted himself to a thorough examination of thought as an "instrument of real life." The kind of thought that seemed to him to serve best as such an instrument was characterized by the richness of imaginative apprehension that he prized in and for itself.

When Coleridge talked in terms of the distinction between the reason and the understanding he was, of course, accepting a "faculty psychology" that actually belied his own conception of the organic unity of living processes. This we have since come to realize. But by means of the distinction he emphasized truths that have been easily translated into other terms. Even in his own informal analyses of thought processes the distinction between the two separate faculties is often lost sight of in the distinctions between different ways of thinking and different theories of reasoning that were his real concern. And if it were possible to reconstruct the past so as to estimate justly the influence Coleridge has had on educators and logicians, in America, for instance,[32] one might discover that he had laid several stones in the pavement leading to the instrumentalist reaction against an idealism with which he has been closely associated; for some of his suggestions of the instrumental function of the understanding as contrasted with the reason could scarcely fail of wider application by later logicians who had ceased to think in terms of the separate faculties.

But this is hypothesis. The facts of Coleridge's activities in the interrelated fields of scientific methodology, education, and logic speak best for themselves, as they appear in his published works and in biographical accounts, in the fresh material that is here presented, and in the compilations of miscellaneous data made for the sake of accent in the critical chapters that follow.

[32] See below, p. 43.

THE POTENTIAL SCIENTIST

COLERIDGE, in early manhood, was intimate with Mr. afterwards Sir Humphry Davy. Perhaps at that moment there were no two young minds in England, more alike in their original endowments for poetry and science, than these two young men.

NOAH PORTER, *Coleridge and His American Disciples,* 1847.

WHAT was called the mathematical method in the seventeenth and eighteenth centuries, led to barren results. . . . Kant gave the hint of truer views; Coleridge can hardly be said to have expanded it, but he applied it in full faith, and so made a beginning; what the end will be, no man can prophesy. Again his cherished studies in physiology and chemistry mark at least his thorough enjoyment of those natural sciences which we are told are to supersede philosophy.

F. J. A. HORT, *Coleridge,* 1856.

THINKING can go but *half* way. . . . To know the *whole* truth we must likewise ACT: and he alone acts, who *makes*—and this can no man do, estranged from Nature. Learn to know thyself in Nature, that thou mayest understand Nature in thyself.

COLERIDGE, Correspondence, *Blackwoods Magazine,* October, 1821.

MEDICAL CONTROVERSIES AND THE *THEORY OF LIFE*

IN an unpublished note written in a copy of her father's posthumous *Theory of Life,* Sarah Coleridge expressed her strong disagreement with Dr. Seth Watson, who held that the work should probably be considered "as the joint production of Mr. Coleridge and the late Mr. James Gillman, of Highgate."[1] Assuming, apparently, that the "intimate friend" referred to in Watson's editorial postscript was no other than Watson himself, she wrote:

The "intimate friend" was a young schoolboy when this essay was composed. . . . He was not in his teens even when the contents of this vol. and the Treatise on Scrofula, of which it is an offset, were written. . . . The only circumstances tending to show Mr. Gillman's authorship was its being written in his name. On the wrapper was written "a Lecture by Mr. James Gillman to be read at the Royal College of Surgeons by Mr. Stanley." I repeat this from memory; and a note in the work speaks of "my profession." But this—when

[1] *Hints towards the Formation of a More Comprehensive Theory of Life.* Postscript, added because of circumstances that arose "on the eve of publication."

all the circumstances of the case are considered, does not prove Mr. G.'s authorship.

And in a manuscript note, dated 1890, left by Ernest Hartley Coleridge, stands the statement:

> The MS of the Theory of Life was written at Coleridge's dictation and in part revised and corrected by him. It was intended to form part of an Essay on Scrofula which was begun by James Gillman Senior.[2]

Interesting as these notes are in their bearing on the authorship and date of the essay, what especially piques one's curiosity is the matter-of-fact way in which both the daughter and the grandson of the poet assert that the work bore some close relationship to a technical medical treatise. Unfortunately, this treatise of Gillman's was never completed and published; the best that can be done now, in seeking a clue to the apparently far-fetched relationship, is to turn to a contemporary treatise on scrofula by E. A. Lloyd, awarded the Jacksonian Prize for 1818 by the Royal College of Surgeons. This essay[3] was dedicated to John Abernethy, with the statement that one of its principal objects was to "establish, in a single but important instance," the truth of the principles which Abernethy had so long maintained "concerning the dependence of local diseases on general disorder of the system, and particularly on disorder of the digestive organs, and which have now forced their way through all the opposition of prejudice and old opinion, in a manner which marks at once their inherent excellence and truth." Now Abernethy's theory of the dependence of local diseases on general disorder of the system was an integral part of his physiological and philosophical theory of life; and a re-reading of Coleridge's essay, especially his recognition of Abernethy's part in developing "the true idea of life" suggested

[2] The two MS notes are in the possession of the Rev. G. H. B. Coleridge of Leatherhead. For recent studies of the authenticity of the *Theory of Life* and its probable date, see H. Nidecker's work printed 1927, *Bericht der philologische-historischen Abteilung der philosophischen Fakultät der Universität Basel,* and a note of mine entitled "Coleridgeana," in the *Review of English Studies,* October, 1928.

[3] *A Treatise on the Nature and Treatment of Scrofula—Founded on an Essay to Which the Jacksonian Prize, for the year 1818, Was Adjudged by the Royal College of Surgeons* (London, 1821).

by John Hunter, and his attempt to justify Abernethy's position in the face of criticisms by Sir William Lawrence,[4] makes it fairly clear that the right clue has been discovered. More than this, the reader finds himself suddenly in the thick of a medico-philosophical controversy in which Coleridge was evidently far from being a passive spectator—a controversy which was undoubtedly an important factor in determining the tenor of his philosophic thought.

For, in his championship of Hunter, Abernethy had involved himself in difficulties. Sir William Lawrence, his junior colleague in the College of Surgeons, seems to have led the opposition, charging that Abernethy misinterpreted Hunter in the interests of a theory both unscientific and ludicrous. Coleridge has told part of the story in his *Theory of Life;* George Macilwain has told more of it in his *Memoirs of Abernethy;* the original documents are available in collections of Abernethy's and Lawrence's lectures. The fundamental questions of the controversy seem to have been two: first, the relation of structure to function; second, the place of theory in physiological investigation—broadly speaking, the method of scientific thought and procedure.

That life was independent of organization or structure, and prior to it, was the position that Abernethy maintained as Hunter's and as his own; and the "poetic imagination" with which he "dramatized"[5] his predecessor's theory of a vital principle laid him open to the attacks of opponents who still professed loyalty to Hunter. For John Hunter, said Lawrence, "did not attempt to explain life by barren a priori speculations, or by the illusory analogies of other sciences"; Lawrence had no sympathy with followers of Hunter who compared the vital principle to magnetism, electricity, galvanism, oxygen—" 'Tis like a camel, or like a whale, or like what you please," he scoffed.[6]

It goes without saying that each faction found in Hunter's works what it wished to find. Lawrence, keeping his theology and his science well segregated, felt no need of a vitalistic

[4] Introduction and pp. 60 ff.

[5] Cf. F. H. Garrison, *An Introduction to the History of Medicine* (3d ed.), pp. 356-357.

[6] *Introduction to Comparative Anatomy,* 1816, pp. 163-169.

philosophy that should assert the autonomy of "life." His theological faith was able to take care of itself.

> That life then, or the assemblage of all the functions, is immediately dependent on organization, appears to me, physiologically speaking, as clear as that the presence of the sun above the horizon causes the light of day. . . . I say, *physiologically* speaking; and beg you to attend particularly to this qualification: because the theological doctrine of the soul, and its separate existence, has nothing to do with this physiological question, but rests in a species of proof altogether different. . . . An immaterial and spiritual being could not have been discovered amid the blood and filth of the dissecting-room.[7]

Abernethy, on the other hand, finding in the dissecting room wonders that bade fair to reconcile the spiritual and material worlds, could accept no physical science that did violence to his conception of spirit.

As is almost inevitably the case in any such attempt to bring the spiritual and material orders into relation, Abernethy talked in terms that looked both forward and back; that challenged to a more fundamental science even while they reacted against the most progressive scientific methods of the day. His imaging of the vital principle lent itself easily to uncritical adoption, and his arguments based on moral grounds were undoubtedly vicious as science:

> That in France, in a nation where the writings both of its philosophers and wits have greatly contributed to demoralize the people, I do not therefore wonder that those of their anatomists and physiologists should represent the subject of their studies in a manner conformable to what is esteemed most philosophical or clever. But that in England, the chief excellence of whose inhabitants is, that they are a thinking people, who consider the probable ends of conduct from its beginning; that in this country, particularly after so arduous an examination, and so rational an explanation of the vital phænomena have been presented to us by Mr. Hunter, the mere opinions of some French anatomists, with respect to the nature of life, should be extracted from their general writings, translated, and extolled, cannot, I think, but excite the surprise and indignation of any one fully apprized of their pernicious tendency.[8]

But the forward-looking implications of his views are quite as

[7] *Lectures on Physiology . . .* (1822), p. 7.
[8] *Physiological Lectures* (1817), p. 52.

unmistakable. To his way of thinking the hypothesis of the priority of function to structure was more than a moral and theological necessity; it was an essential of any idea of functional unity in the organism. It was the philosophical justification of his theory of the origin of local disease and also of his theory of surgical and medical education; for it was because of the functional unity of the organism that he would argue: "Medicine is one and indivisible; it must be learned as a whole, for no part can be understood, if studied separately. The physician must understand surgery, and the surgeon the medical treatment of diseases."[9] One need only read such an address as that delivered by Sir William Collins before the Abernethian Society as late as 1905[10] to recognize the fruitfulness of Abernethy's ideas on pathology, medical education, and the interrelations of medicine and philosophy. And it takes little if any stretching of the imagination to see developments of his way of thinking, if not direct influence, in sundry contemporary medical works.[11]

The second question raised in the controversy was the inevitable result of the argument over the first. It was impossible to discuss the pros and cons of the opposed hypotheses regarding the nature of life without bringing to clear consciousness the question of the value of hypothesis and theory in scientific work. Abernethy, in eulogizing Hunter, made the most of his theories and hypotheses, but justified them on grounds that suggest the instrumentalist's point of view; he justified them, that is, on grounds of the concrete investigations that they provoked and controlled:

> Why do we note facts with accuracy, or collect them with diligence? why do we interrogate nature by experiment? Is it not because we wish to prove some of our own opinions to be true, or the

[9] *The Hunterian Oration for the Year 1819* (London, 1819), p. 30.

[10] "Physic and Metaphysic," Supplement to *St. Bartholomew's Hospital Journal,* April, 1905.

[11] See, for instance, F. G. Crookshank's supplement to Ogden and Richards' *The Meaning of Meaning* (1925), and his introduction to C. G. Cumston's *History of Medicine* (1926); also the closing pages of R. O. Moon's *Relations of Medicine and Philosophy* (1909). J. H. Muirhead has recently suggested the value of studying the relations of modern medicine to philosophy, citing, incidentally, J. H. Green and J. H. Stirling as men to whom medical training had given "an eye for biological illustrations of the idealistic principle" (*Mind,* XXXVI, October, 1927, 439 note).

opposing opinions of others to be false? or, because we wish to enlarge the boundaries of science in a direction in which we think they admit of extension? . . . Feelings and opinions are the chief sources of all our intellectual conduct. . . . Our theories, hypotheses, or opinions . . . should be verifiable or probable, and should rationally account for all the known phænomena of the subject they pretend to explain; under which circumstances it is allowable to maintain them as good, until others more satisfactory be discovered. . . . Upon the foregoing terms alone do I wish to uphold Mr. Hunter's theory of life; and I do so on the present occasion, because it seems highly probable, it was his thinking in the manner he was known to do, that caused him to survey all the facts connected with the subject of life in general with so much accuracy, as well as to note its disordered states and sympathies in a manner which has so greatly contributed to increase our practical knowledge. It is highly probable that it was his hypothesis respecting life which incited him to enquiries by which he has been able to supply the deficient facts, so as to establish his conjectures, or convert his hypothesis into a theory.[12]

Lawrence, on the other hand, championed Hunter by minimizing the amount of speculation involved. With Hunter's works unpublished, proof one way or the other was difficult. But later Hunterians, with the evidence before them, seem to have taken a middle course, minimizing the amount of speculation in his work, but, to the extent to which they do recognize it, emphatically approving it as an indispensable instrument of scientific progress. "All experience shows that speculation on the abstract nature of things is, to the last degree, unprofitable," Macilwain wrote in 1853, in an attempt to justify Hunter and Abernethy at once. "Nothing is so clear in all sciences as that the proper study of mankind is the Laws by which they are governed. Yet we cannot, in any science, proceed without something to give an intelligible expression to our ideas, which *something* is essentially hypothetical."[13] The question persisted as a matter of general interest for some time. Even later than Macilwain's publication of the *Memoirs,* Coleridge's disciple, Green, then president of the Royal College of Surgeons, argued the point in his address to the committee on the erection of a statue of Hunter: "It was the peculiar and eminent merit of Hunter," he stated, "that, instead of wasting his time and at-

[12] *Introductory Lectures . . . 1814 and 1815* (ed. 1823), pp. 9-12.
[13] George Macilwain, *Memoirs of John Abernethy* (1853), p. 208.

tention on hypotheses and conjectures with regard to the nature and essence of living forces, he had raised his mind to the apprehension of life as a law in aid of a science of vital dynamics, and as the means of giving scientific unity to the facts of living nature."[14] He added that the pregnancy of his idea was evidenced by his museum collection.

Such was the controversial environment in which Coleridge's philosophy of science defined itself, and there can be no adequate account of the making of his metaphysical system—of the influences exerted by the Neo-Platonists, the English divines, the German Natur-Philosophen—that does not recognize his participation in contemporary scientific discussions and his sense of their philosophic implications. Coleridge's intellectual congeniality with Abernethy is to be seen in his tendency to confuse scientific and moral issues and his recurrent slurs on French morals and French science; but equally in his constructive effort that makes one forget such limitations, the effort to image living processes more adequately than they were imaged by the associationists and mechanists, and to encourage apposite reforms in education. The bearings of the controversy on his ontological and cosmological theories are evident in his scientific marginalia (many still unpublished), manuscript fragments designed for the "Opus Maximum," some of the more speculative passages of his completed works, and especially the posthumous *Theory of Life.*

"In Mr. Abernethy's Lecture on the Theory of Life," Coleridge wrote in his own essay on the subject, "it is impossible not to see a presentiment of a great truth. . . . If the opinions here supported are the same with those of Mr. Abernethy, I rejoice in his authority. If they are different, I shall wait with an anxious interest for an exposition of that difference."[15] Life Coleridge defined "as *the principle of individuation,* or the power which unites a given *all* into a *whole* that is pre-supposed by all its parts."[16] "Life itself is not a *thing*—a self-subsistent *hypostasis*—but an *act* and *process;* which, pitiable as the prejudice will appear to the *forts esprits,* is a great deal more than either my reason would authorize or my conscience allow me to assert—concerning the Soul, as the principle both of

[14] Delivered and printed 1859; pp. 5-6.
[15] *Theory of Life,* p. 65. [16] *Ibid.,* p. 42.

Reason and Conscience."[17] The process as worked out in detail manifested the principle of organic growth in combination with the principle of polarity that appears in magnetism and electricity. Both these principles are of course significant for any survey of Coleridge's art of reasoning and his science of method.

In fact, the connections of these medical and physiological controversies with Coleridge's work in education, methodology, and logic are just as unmistakable, and nearly as obvious, as their connections with his more metaphysical theories. The vitalistic principle of organic growth appears, for instance, in the terms "unity with progression" as the fundamental principle of the *Treatise on Method,* being there applied both to the processes of thought manifest in any particular instance, and to the more general process of the education of the individual. The latter application involves, as a corollary, the recognition of the essential unity in variety manifest in the field of knowledge, the various subject matters of education. But Coleridge's attitude toward the more logical questions raised by the scientific controversies, those regarding the nature and function of thought, is of peculiar interest and deserves whatever illumination can be thrown on it by the fullest possible treatment. The story of his relation to Humphry Davy affords at least a side light.

THE METHOD OF SCIENCE: COLERIDGE AND DAVY

O how gladly would I resign my life . . . to procure for mankind such health and longevity to H. Davy, as should enable him to discover the Element of metals, of Sulphur and of Carbon. O! he will do it! Yea and may perhaps reveal the synthetic Idea of the Antithets, Attraction and Repulsion.

S. T. C.

Alas! since I wrote the preceding note H. Davy is become Sir Humphry Davy and an Atomist!

In these two manuscript notes, written in Coleridge's copy of Böhme's works,[18] are epitomized the comedy and the tragedy

[17] *Ibid.,* pp. 93-94.

[18] The notes are taken from E. H. Coleridge's transcripts, now at Leatherhead.

—and something that is neither comedy nor tragedy—of his participation in the scientific controversies of his time.

Although Humphry Davy's interest in chemical experiment kept him from devoting much of his energy to medicine proper, his work looms large in the record of the medical controversy under consideration. He was the hope of other vitalists than Coleridge. "The experiments of Sir Humphry Davy," Abernethy said in his lecture of 1814, "seem to realize the speculations of philosophers, and to verify the deductions of reason, by demonstrating the existence of a suitable, active, *vital principle, pervading all nature* as has heretofore been surmised, and denominated the Anima Mundi. The opinions which in former times were a justifiable hypothesis, seem to me now to be converted into a rational theory."[19] Coleridge's personal friendship with Davy was undoubtedly a potent influence in his life.

As a matter of fact, a biographer of Coleridge who should make a study of all his personal contacts with medical men might go very far toward explaining his interest both in the results of contemporary scientific investigations and in methodology. As a child, we know from his own account in Gillman's *Life,* he was fascinated by the work of his surgeon brother Luke and Luke's friend Mr. Saumarez. From other biographical accounts and collections of letters we know that during his early years at Bristol he was intimately acquainted with Dr. Beddoes, the young liberal from Oxford who set up the Pneumatic Institute where Davy did much of his experimenting with anesthetic gases. In Germany Coleridge attended Blumenbach's lectures, and apparently knew the great physiologist personally. In 1800, according to Campbell, he and his family "stayed eight or nine days at Liverpool as the guests of Dr. Crompton . . . and saw much of the remarkable group of which Roscoe, Rathbone, and Dr. Currie," were the principal members.[20] In 1810 he was trying to get into touch with Abernethy. He wrote the Morgans, December 21, from Fleet Street: "My *immediate* plan is not to trouble myself further about any introduction to Abernethy, but to write a plain, honest, and full account of my state, its history, causes, and occasions, and to send it to him with two or three pounds enclosed, and asking

[19] *Introductory Lectures,* pp. 42-43.
[20] J. D. Campbell, *Samuel Taylor Coleridge.*

him to take me under his further care." Two years before he had reported to Mrs. Morgan that he had sent for Abernethy, "who has restored Mr. De Quincey to health."[21] Whether or not the two actually entered into professional relations, it is clear that Abernethy came to know Coleridge as a lecturer, for in his Hunterian oration of 1819 he replied to Lawrence's charges of anti-French prejudices by saying: "With respect to the subject of nationality . . . I wish to submit a sentence, which I remember to have heard in Mr. Coleridge's lectures, to Mr. Lawrence's consideration. There can be no sincere cosmopolitan, who is not also a patriot." In 1814 Coleridge thought of residing with a Mr. Page, surgeon, of Calne. In 1815-16 he was corresponding with Dr. Brabant of Devizes. In 1816 Mr. Joseph Adams, a surgeon who, incidentally, wrote a sympathetic memoir of John Hunter, was asking James Gillman to take Coleridge into his family.[22] Coleridge's relations with Gillman and with Joseph Henry Green are too well known to need recounting. How active Gillman was in the medical controversies of his time it is not easy to discover,[23] but it is definitely known that he and Coleridge enjoyed philosophizing together on problems under discussion in medical circles.[24] Gillman's plans for his treatise on scrofula seem, according to Sarah Coleridge's note, to have included its being read at the College of Surgeons by Mr. Stanley; and as Mr. Stanley was the pupil and successor of Abernethy at St. Bartholomew's Hospital, this item may have some bearing on the question of Gillman's and Coleridge's relations to the Hunterian group.

But in lieu of such a chapter of Coleridge's biography as would deal with all these relationships, it is fortunate that there exist, in fairly available form, materials for the story of his friendship with Humphry Davy, the story that lay behind the exclamations of longing and regret that he jotted down on the margins of his Böhme. Such bits of the material as can be given here show that it is a narrative of warm friendship, congeniality

[21] *Letters* (1895), pp. 564 and 525. [22] Turnbull, *op. cit.*, II, 149-150.

[23] The only professional publication of Gillman's that I have found is a prize dissertation *On the Bite of a Rabid Animal* (London, 1812), dedicated to the surgeon, Sir Anthony Carlisle, and containing an appendix written by him.

[24] See, for example, A. W. Gillman, *The Gillmans of Highgate* (1895), pp. 40-41.

of tastes, both scientific and literary, and mutual admiration, followed by a marked divergence in interests and methodology.

Coleridge's published letters give evidence that in 1800 and 1801 he was frequently asking Davy's advice on various matters of scientific interest, from a plan of translating Blumenbach's lectures to the setting up of a chemical laboratory of his own. For a number of years Coleridge had taken a philosophical interest in chemical science. In 1796 he had written Thelwall:

> Dr. Beddoes and Dr. Darwin think that *Life* is utterly inexplicable, writing as materialists. You, I understand, have adopted the idea that it is the result of organised matter acted on by external stimuli. As likely as any other system, but you assume the thing to be proved. The "capability of being stimulated into sensation" . . . is my definition of *animal* life. Monro believes in a plastic, immaterial nature, all-pervading. . . . Hunter says that the *blood* is the life, which is saying nothing at all; . . . and Ferriar believes in a *soul*, like an orthodox churchman. So much for physicians and surgeons![25]

And a letter of 1801 to Davy included the following description of his state of mind at that time about chemistry:

> As far as *words* go, I have become a formidable chemist—having got by heart a prodigious quantity of terms, etc., to which I attach *some* ideas, very scanty in number, I assure you, and right meagre in their individual persons. That which must discourage me in it is, that I find all *power* of vital attributes to depend on modes of *arrangement*, and that chemistry throws not even a distant rushlight of glimmer upon this subject. The *reasoning*, likewise, is always unsatisfactory to me. I am perpetually saying, probably there are many agents hitherto undiscovered. This cannot be reasoning: we must have a deep conviction that all the *terms* have been exhausted. This is saying no more than that (with Dr. Beddoes's leave) chemistry can never possess the same kind of certainty with the mathematics—in truth, it is saying nothing. I grow, however, exceedingly interested in the subject.[26]

But as Davy went on with his work Coleridge began to hope that chemistry was, after all, to throw some light on a vital power not dependent on arrangement. Electricity, magnetism, experiments in galvanism, spoke of forces that could not be construed in terms of the arrangement of atoms. But he had

[25] *Letters* (1895), p. 211.

[26] Turnbull, *op. cit.*, I, 245.

some qualms. Was Davy a true philosopher? Did he recognize true philosophy? To Richard Sharp he wrote in 1804 (January 15):

I have met with several genuine Philologists, Philonoists, Physiophilists, keen hunters after knowledge and science; but truth and wisdom are higher names than these—and *revering* Davy, I am half angry with him for doing that which would make me laugh in another man—I mean, for prostituting and profaning the name of "Philosopher," "great Philosopher," "eminent Philosopher," etc., etc., etc., to every fellow who has made a lucky experiment, though the man should be Frenchified to the heart, and though the whole Seine, with all its filth and poison, flows in his veins and arteries.[27]

On the 26th of January he wrote Poole:

I . . . called on Davy, who seems more and more determined to mould himself upon the Age, in order to make the Age mould itself upon him. Into this language at least I could have translated his conversation. Oh, it is a dangerous business, this bowing the head in the Temple of Rimmon; and such men I aptly christen *Theo-mammonists,* that is, those who at once worship God and Mammon. However, God grant better things of so noble a work of His![28]

In 1807, when Davy was seriously ill, Coleridge still expressed his faith, exclaiming in a letter to Southey:

I cannot express what I have suffered. Good heaven! in the very springtide of his honour—his? his country's! the world's! after discoveries more intellectual, more ennobling, and impowering human nature than Newton's! But he must not die![29]

It was probably not long after this that he wrote the first note in the copy of Böhme.

The second note obviously was written after Davy had been knighted in 1812. What had happened in the meantime? Had Davy gone over to the atomists? His brother and biographer is at some pains to explain his position with regard to Dalton and his atomic theory. It appears that Davy accepted part of Dalton's doctrine, but not all; that he held, both early and late, the view expressed in the person of Philochemicus in an unfinished dialogue written shortly before his death:

[27] *Letters* (1895), p. 448.
[28] *Ibid.,* p. 455.
[29] *Ibid.,* p. 521.

"Indeed, in my opinion," said Philochemicus, "Mr. Dalton is too much of an *Atomic Philosopher;* and in making atoms arrange themselves according to his own hypothesis, he has often indulged in vain speculation; and the essential and truly useful part of his doctrine, the expression of the quantities in which bodies combine, is perfectly independent of any views respecting the ultimate nature either of matter or its elements."[30]

Perhaps Coleridge failed to get the finer points of Davy's doctrines from the reports of his work that were available—and it must be admitted that when atomism was the issue Coleridge was in no frame of mind for fine distinctions. At all events, whether he misunderstood Davy or not, his skepticism grew, and the two seem to have made few connections during the later periods of their lives. In 1823 Davy wrote that he had just met Coleridge and invited him to dine with him—the first meeting in years.[31] It would be interesting to know the conversation that took place at the dinner.

Fortunately both sides of the story have been recorded. Coleridge's expressions of hopes and fears for his friend may well be supplemented by a few of Davy's remarks about Coleridge and other evidences of Davy's own scientific and philosophic development that suggest pretty clearly what must have been the reasons for the widening breach. It was in 1803 that Davy sent Poole his famous description of Coleridge:

Brilliant images of greatness float upon his mind, like images of the morning clouds on the waters. Their forms are changed by the motions of the waves, they are agitated by every breeze, and modified by every sunbeam . . . What talent does he not waste in forming visions, sublime, but unconnected with the real world! I have looked to his efforts, as to the efforts of a creating being; but as yet he has not laid the foundation for the new world of intellectual forms.[32]

In 1804 he was trying to encourage Coleridge to do the creative work for which he was destined—

You are to be the historian of the philosophy of feeling. Do not in any way dissipate your noble nature! Do not give up your birthright![33]

[30] *Fragmentary Remains of Sir Humphry Davy,* ed. John Davy (1858), p. 122; *Works* (1839-40), V, 330 note.
[31] *Fragmentary Remains,* p. 114. [32] *Ibid.,* p. 74.
[33] *Ibid.,* p. 95.

In 1807, as professor at the Royal Institution, Davy was arranging to have Coleridge give a course of lectures there. Coleridge's temperamental peculiarities made it difficult for Davy to put the plan through, but he was persistent, and succeeded in bringing about a number of appearances.

> The managers of the Royal Institution are very anxious to engage him [Davy wrote Poole], and I think he might be of material service to the public, and of benefit to his own mind . . . In the present condition of society, his opinions in matters of taste, literature, and metaphysics must have a healthy influence; and, unless he soon become an actual member of the living world, he must expect to be brought to judgment for "hiding his light."[34]

And later, writing Poole how Coleridge had disappointed his audience on account of illness, he said:

> His mind is a wilderness, in which the cedar and the oak, which might aspire to the skies, are stunted in their growth by underwood, thorns, briars, and parasitic plants. With the most exalted genius, enlarged views, sensitive heart, and enlightened mind, he will yet be the victim of want of order, precision, regularity.[35]

Davy's doubts about his friend were evidently doubts as to his ability to apply himself and realize his own powers, rather than any serious questioning of the validity of his views. Yet it is significant that Davy's hope for him was as a critical philosopher rather than as a propounder of any final metaphysical system; it was "a new world of intellectual forms" that he was to create, and he was to be the "*historian* of the philosophy of feeling." This is what one might expect, for however great Davy's interest in metaphysical speculation may have been when Coleridge first knew him—and there are indications that it was all that even Coleridge could have asked—he soon outgrew it. John Davy gives clear evidence on this point in the "Memoirs" which preface the collected *Works;* he quotes from notebooks which one can only wish had been published in full:

"I began the pursuit of chemistry by speculations and theories: more mature reflection convinced me of my errors, and of the limitation of our powers,—the dangers of false gen-

[34] Mrs. Henry Sandford, *Thomas Poole and His Friends* (1888), II, 193.
[35] *Fragmentary Remains,* p. 75.

eralization, and the difficulty of forming true ones." This, John Davy noted, he found in darker ink, written "between the lines of a note-book kept in 1799, consisting chiefly of speculative views concerning the connexion of life and chemical action, or of physiology and chemistry."[36] The notebooks contained many entries on the subject of theory and its place in science, some of them well worth reprinting today:

> General terms—what some metaphysicians have called abstract ideas, arise from the association of analogy by a very simple operation—not, as Jean Jacques Rousseau supposed, by a very complicated one.—No metaphysical system, and, indeed, no system can be any thing more than a history,—not in the order of impression, but in the order of arrangement by analogy.—Our opinions are much oftener formed by our feelings, and modified by them, than our feelings by our opinions.—Our actions are neither the result of feelings or opinions; they are modified by them both, but are produced by habits.—We ought to reason from effects alone. False philosophy has uniformly depended upon making use of words which signify no definite ideas.—Theories ought to be made for time, and be considered capable of improvement.—That man must indeed be badly organised whom nature is incapable of instructing. The theorising habit in a sound mind can counteract only for a short time the love of seeing things in their real light.[37]

It was inevitable that Davy should see the tragedy and perhaps the comedy of the theorizing habit as it manifested itself in Coleridge. For Coleridge's concern with science may fairly be taken as the effort of a philosophic partisan to justify his philosophic position. But the quality of the effort is what deserves attention. His dreams of finding in the material universe the expression of an idea was a dream that could come true for him only if he could find the idea actually at work in every department of scientifically intelligible life. Noah Porter, in the footnote on Coleridge and Davy from which the quotation at the head of this chapter is taken, construed the wide divergence between the two men as

> a fine comment on the difference between a man who makes his impulses his law, or in other words is a lawless rover in the intellectual world, and one who attaches himself to the minds of others, and

[36] *Works*, I, 54.

[37] *Ibid.*, I, 68-70.

by bending to their wants and sympathies, wields and commands his generation.[38]

Coleridge was a rover without doubt, and perhaps if he had confined himself to some more specialized occupation he would have been forced by hard facts out of his theorizing habit. But for one so keenly aware of the remotest implications of ideas a large amount of wandering about the intellectual universe was an essential part of his work of scientific verification. And superficial as this work often was, it was yet undertaken with a sufficient respect for the integrity of what is called fact to make it serviceable in clarifying and further defining the position it hoped to justify.

Moreover, there was something in the nature of Coleridge's particular philosophic bias that made him an admirable critic of certain scientific methods then current and of the processes of thought involved. His vitalistic philosophy combined with his profound interest in experiments and investigations of fact resulted in telling arraignments of mechanistic hypotheses and a challenge to scientists to re-image their world. Where, as so often happened, his own images fell short, they at least suggested the inadequacy of what they sought to replace. And in the course of his collision with thinkers of an opposite school he was forced into a fundamental consideration of the processes of thought. There resulted a vivid realization of the extent to which all thinking is determined by assumptions, ideas, images, and attitudes of even less tangible sorts. Coleridge's insistence that fertile thinking involved more than induction, and experience more than what it commonly meant to empiricists; that the premises are the critical part of reasoning, and that they depend on something other than the understanding—on a power that brings into play the total man,—these principles of thought and method were formulated through his contacts with many philosophic minds, but to no small extent through their use in the physiological and chemical controversies in which he took part.[39]

Coleridge's whole life may be looked upon as the story, the

[38] *Bibliotheca Sacra* IV (1847), 117 ff.

[39] In the 1809-10 *Friend* Coleridge makes significant use of Davy's work to illustrate his own principle of scientific method (No. 19, p. 294). Cf. 1818 *Friend,* III, 276-277.

drama, of the born thinker trying to prove that thought mattered. Among the medical men of his intellectual acquaintance he found that it did matter. The opposing ideas of the vitalistic and mechanistic schools were actually expressed in the details of their physiological and chemical science and in their methods of medical treatment and medical education. He could not go so far as Abernethy in arguing the value of the idea chiefly on the ground of its fertility in scientific investigations; it was too sacred for that. And at times his theological and metaphysical theories actually stood in the way of his acceptance of what was most sound in contemporary scientific procedure. But on the whole he was fascinated by the conception of logic as an "organum," an "instrument of real life." And viewing the reasoning process as it actually functioned in the world of science, he found that what really counted was not the conceptions and syllogistic reasonings of the "understanding," for these could be largely taken for granted, but the primary apprehension, the mode of imaging—the "Idea" with which the subject was approached. This realization, achieved in part through his interests in science, determined the nature of much of his work as educator and logician. The principle of organic growth and the principle of polarity that he found exemplified in electricity, magnetism, and chemical action, both offered themselves as illuminating ideas with which to approach all varieties of material, including the processes of human thought. Coleridge's essays on the science of method were conditioned largely by the idea of organic growth. His work on logic so called contained further developments of this idea, and promised, in the missing "Noetic," to expound the principle of polarity in terms of the growth and discipline of ideas.

ENCYCLOPEDIST AND EDUCATOR

. . . A STILL more important argument for our plan and for the period of its execution, will be found in the manifest tendency of all the Arts and Sciences at present, from the most purely intellectual even to the labours of the common mechanic, to lose their former insulated character, and organize themselves into one harmonious body of knowledge. The civilized world is now doing that which the ENCYCLOPÆDIA METROPOLITANA is preparing to do; and for which it is providing a correspondent repository. . . .

The *Encyclopædia Metropolitana* was projected by the late eminent poet and philosopher, S. T. COLERIDGE. It differs in its plan from other Dictionaries of Universal Knowledge in being strictly methodical. The contributions of the scientific and learned men by whom it was composed, are arranged, not according to the letters of the alphabet which happen to form the initials of the English *names* of the Treatises, but in agreement with a PHILOSOPHICAL SYSTEM, based on the *nature* of the Subjects,—a method which causes the entire work to become a rational exposition of the state of human knowledge, and the mutual dependence and relative importance of its different branches.

Prospectus of the Cabinet Edition of the *Encyclopædia Metropolitana,* 1849.

I AM free to confess . . . that I should scarcely have ventured on the difficult task of portraying the leading requisites and final intention of a liberal education,—under a deep sense both of responsibility and duty—were I not cheered by the example, and aided by the lessons of my reverend teacher, and lamented friend, Samuel Taylor Coleridge.

JOSEPH HENRY GREEN, Hunterian Oration, delivered before the Royal College of Surgeons, 1847.

THE *ENCYCLOPÆDIA METROPOLITANA*

THE importance of Coleridge's essays on method as they appeared in the 1818 and subsequent editions of *The Friend*[1] is generally acknowledged. They are constantly referred to, as relatively adequate expressions of fundamental and closely related tenets of his philosophy: the distinction between the reason and the understanding, the insufficiency of the so-called inductive method, and the possibility of reconciling the philosophy of Bacon with that of Plato. The earlier formulation of the material, the *Preliminary Treatise on Method* which appeared a few months before the publication of *The Friend* as the *General Introduction to the Encyclopædia Metropolitana,* is less well known. This fact may be accounted for in part by the relative scarcity of the earlier version, al-

[1] 1818, Vol. III, Essays 4-10 (misprinted "9"); later editions, 4-11.

though it was reprinted several times.[2] It is likely, however, that the impossibility of discovering to what extent and in what ways Coleridge's manuscript was altered by the publishers of the *Encyclopædia* has made students question the desirability of including it in the Coleridge canon.

Campbell has given the story of the two versions succinctly, with references to more detailed source material.[3] Briefly, the essay as Coleridge submitted it to the *Encyclopædia* was "so bedeviled, so interpolated and topsy-turvied" by the editors, to use his own words, that he found it hard to decide whether it was, in its revised state, more "discreditable" to him "as a man of letters," or "dishonourable" to him "as an honest man." He tried to obtain permission from the publishers to print it correctly in *The Friend,* but when they declined to make any acceptable arrangement, he went his own way and embodied in his book what is commonly accepted as the substance of the original. It will probably never be possible to reconstruct the treatise as Coleridge meant it to stand in the *Encyclopædia,* but enough fragments of an early draft are in existence[4] to indicate that the essays as they stand in *The Friend* would have to be supplemented and considerably modified to give an adequate idea of its scope and general tenor.

In spite of the seriousness of this problem of authenticity there is much to be gained from a consideration of the essay in its earlier printed form and in its intended context. Both versions afford evidence of one of Coleridge's special educational interests—his interest in the organic nature of the processes of thought; but the material as it was rewritten for *The Friend* reflects only faintly his equally profound interest in the various subject matters of education and their interrelationships. The difference in intention and emphasis may be illustrated from the different uses that the two versions make of Shakespearean material: passages used in the "General Introduction" to show that the poet as well as the scientist employs method, and that poetry is therefore a legitimate subject

[2] See Thomas J. Wise's *Bibliography,* pp. 114-117.

[3] Campbell, pp. 227-228 and 232-233, with references to letters published by G. M. Towle in *Lippincott's Magazine* for June, 1874, and to *Notes and Queries,* 1st series, X, 22.

[4] British Museum MS, Egerton 2800, pp. 78 ff.

matter of education, are, in *The Friend,* introduced primarily to show method or want of method in the thoughts and conversations of the characters themselves—the method of the poet is a secondary consideration.[5] The *Treatise on Method* was manifestly written to introduce the new encyclopedia which was to present the various sections of the field of learning according to a system itself methodical in the philosophic sense of the word. In common with the essays in *The Friend* it brought home to its readers the necessity of "unity with progression" in all activities of life, and in addition it suggested the need of arranging the materials of academic study in a way that would be conducive of mental growth rather than mere acquisition of factual knowledge.

Coleridge's work for the *Encyclopædia* was the culmination of an interest of long duration. It dates back at least to 1803, when he was propounding a scheme for Southey's "grand work," a "Bibliotheca Britannica" that should, except for two catalogue volumes, consist of complete treatises, each volume being designed to "*set up* the reader, give him at once connected trains of thought and facts, and a delightful miscellany for lounge reading." His condemnation of the ordinary encyclopedia was quite as definite at this time as it was later when he was actually engaged in the project of the *Metropolitana,* and his reference to the classical use of the term was an anticipation of the "Prospectus":

> By the bye, what a strange abuse has been made of the word encyclopædia. It signifies properly, grammar, logic, rhetoric, and ethics, and metaphysics, which last, explaining the ultimate principle of grammar—log.—rhet., and eth.—formed a circle of knowledge . . . To call a huge unconnected miscellany of the *omne scibile,* in an arrangement determined by the accident of initial letters, an encyclopædia is the impudent ignorance of your Presbyterian bookmakers;

and in answering Southey's objections urged in favor of a more conventional plan—"An encyclopædia appears to me a worthless monster."[6]

[5] Cf. *The Friend,* Vol. III, Essay 4 and the *Preliminary Treatise on Method,* pp. 35-44.

[6] Letters to Southey, dated "July" and August 7, 1803, *Letters* (1895), pp. 425 ff. Cf. *Life and Correspondence of Southey* (1849-50), II, 216-217.

In 1817 came Coleridge's opportunity to work out his ideas. That the *Treatise on Method* was in fact a development of his interest in the "Bibliotheca Britannica" has been noted, but in terms that unfortunately minimize his actual accomplishment.[7] There seems to be little doubt that Coleridge was largely responsible for the scheme of the encyclopedia as a whole as well as for its introductory essay. It is true that a disagreement with the publishers lost him the general editorship which he apparently had hoped to hold. A letter of June 18, 1817, published by G. M. Towle, contains a statement of an arrangement "which seems afterwards," the editor writes, "to have been rescinded by mutual agreement." According to this statement Coleridge was to furnish the introduction—forwarding copy in instalments, the treatise on grammar, and the English lexicon, and moreover "to give to the superintendence of the work one entire morning every fortnight, from 10 to 5 if required."[8] According to Campbell it was when Coleridge demanded part of his remuneration in advance that the arrangement broke down, and he was left with no further share in the undertaking than the contribution of the "General Introduction." He had, however, succeeded in getting the publishers to accept the plan which he had drawn up, and much of the prospectus he had prepared. The following advertisement which appeared in the *Courier,* January 7, 1818, gives the essentials of the scheme.

This day is published, Vol. I. Part I. of the
ENCYCLOPÆDIA METROPOLITANA: or
UNIVERSAL DICTIONARY of KNOWLEDGE, on

an Original Plan; with appropriate and entirely new Engravings; comprising the two-fold advantage of a Philosophical and an Alphabetical Arrangement, in four principal Divisions (a portion of which will be given in every part,) viz—

I. The PURE SCIENCES, 2 vols.

II. The MIXED and APPLIED SCIENCES, 6 vols.

[7] Cf. Helene Richter's reference to the idea of the "Bibliotheca Britannica," "der 1817 zum Plan einer *Encyclopædia Metropolitana* erweitert wird." She adds, "Aber diese Geschichte des menschlichen Wissens kommt nicht über die (in *Friend* abgedruckte) einleitende Abhandlung *Preliminary Treatise on Method* hinaus." (*Anglia,* XLIV [1920], 262.)

[8] *Lippincott's Magazine,* XIII (June, 1874), 697 ff.

III. Biography, chronologically arranged, interspersed with Chapters of National and General History, 8 vols.

IV. An Alphabetical, Miscellaneous, and Supplementary Division, containing a Gazetteer, or complete Vocabulary of Geography; and a Philosophical and Etymological Lexicon of the English Language, 8 vols.

An Index, 1 vol. Total twenty-five volumes. See Prospectus.

Conditions.

1. This Work will be published regularly in Parts, containing about fifty sheets of letter-press, on a fine demy paper, at least once every three months. Two Parts to make a Volume.

2. The price of the Parts, in boards, will be One Guinea. The work will be handsomely printed, and the purchasers may be assured not only of the uniformity and punctuality of its appearance, but also of its completion within the prescribed limits, on the entirely new ground of its digested plan; to which, therefore, particular attention is requested.

3. Each Part will contain, on the average, twelve engravings, and care will be taken that the plates and the correspondent text are published as much as possible together. Authentic portraits will accompany the Biographical Part.

4. A few copies will be printed on super-royal paper, with proof impressions of the plates, price Two Guineas in boards.

The object proposed in the plan of this Encyclopædia, is to unite more perfectly than has hitherto been attempted, the advantages of a scientific arrangement of knowledge, with the conveniences of an alphabetical repertory. As a book of constant reference amongst all classes of the community, its daily usefulness, it is presumed, will be facilitated by the certainty of finding all things in their right places, and, generally each thing at once: while, for the purposes of instruction, and the connected pursuit of scientific knowledge, the decided superiority of a philosophical division of the sciences, must be obvious to every reflecting mind.

The work, in its first two divisions, will be found to contain every portion of human knowledge, and every principle of human conduct, in its natural position amongst first principles, and in its connection with other sciences,—then in its application to all the purposes of life. The Biographical, or third division of the work, proposes to unite two original advantages—a Biography of the eminent men of all countries, chronologically arranged; and the far larger portion of History, in the engaging form of Biography. The Alphabetical and Lexicographical Miscellany, which constitutes the fourth division,

will contain every scientific term in its usual alphabetical position in other Encyclopædias, with a direct reference to its place in this; a complete Gazetteer, accompanied with corresponding Maps and Charts; many particular and local illustrations of science that will admit of no other classification; and every authentic word in the English Language, supported by its authority. An extensive verbal Index, which will be prepared from every sheet as it proceeds, will be published in one volume at the close of the work.

It is evident, that under such an arrangement, the reader will be able to find every thing prominent in the Arts and Sciences at one reference, viz. under its own name or class in the Pure or Mixed Sciences: but in two references, viz. with another to the alphabetical division, it is hardly possible he should be disappointed in the object of his search;—while upon the plan of former Encyclopædias, a purchaser must look through from ten to forty articles in each of the Pure Sciences before he could finish any one.

Published for REST FENNER, Paternoster-row.

The *Encyclopædia* suffered the vicissitudes of fortune that might have been expected, and it was not until 1845 that it was completed, under totally different management from that which had initiated the undertaking in 1817. No sooner was the quarto edition completed than plans were made for putting out the cabinet, octavo edition, in which each treatise was separately bound so that it might be purchased by itself. Coleridge's *Treatise on Method* had already been separately printed once, and thus it appeared as in its third edition in the cabinet, or second, edition of the *Encyclopædia*. Later editions were given various titles, apparently according to publishers' interests in playing up one or another feature of the book. The fifth edition, of 1852, for instance, bore the subtitle, "The Laws and Regulative Principles of Education."[9]

By the time the cabinet edition appeared Coleridge's name was recognized by the proprietors as an important asset, and his part in the undertaking was emphasized in prospectus and advertisements. Changes made would, according to announcements, "bring the whole more strictly into accordance with Mr. COLERIDGE's great idea of the essentials of an Encyclopædia"; they would proceed from "a more rigid adherence . . . to the *principles of Method* established by Mr. Coleridge."[10]

[9] See also Wise, *op. cit.*, pp. 114-117. [10] *Prospectus*, pp. 10 and 12.

In fact, it came to be generally understood by friends and foes alike that for better or for worse Coleridge was responsible for the idea of the work. Samuel Neil, in a paper on Whately, published in 1862, described the project with enthusiasm:[11]

Shortly after this [1812] the magnificent projection of Samuel Taylor Coleridge, "The Encyclopædia Metropolitana," began to occupy the minds of the more ambitious members of the Universities. The grand panoramic dream of "A Methodical Compendium of Human Knowledge," which, in the General Introduction to that gigantic undertaking, he contributed in his "Essay on Method," captivated and dazzled, by its excursive brilliancy, the most able men of the age. . . . The reputation of Whately singled him out as the most competent man to undertake the two treatises on Logic and Rhetoric—treatises which unequivocally established his name and fame, and added greatly to the estimation in which the "Encyclopædia" began to be held. The original intent of the abstracts on these subjects materially influenced if it did not control their first form, and indeed it must have somewhat necessitated the adoption of a plan harmonizing with the scheme of the work of which they were to form a part. This was especially the case with the contribution on Logic, of which Coleridge had furnished the text in these words: "The science of Logic is the knowledge of those forms which the conceptions of the mind assume in the process of reasoning. And it is manifest that this science is . . . subject . . . to fixed laws; for the reasoning power in man can operate only within those limits which Almighty Wisdom has thought fit to prescribe. It is a discursive faculty, moving in a given path, and by allotted means. There is no possibility of subverting or altering the elementary rules of logic; for they are not hypothetical, or contingent, or conventional, but positive and necessary."*

* Coleridge "On Method," Encyc. Met., Cabinet Issue, 3d ed., p. 63.

The *Quarterly Review* a year later published a very unfavorable account of the work, and with evident pleasure gave Coleridge equal credit for it:[12]

The plan [described in some detail] was the proposal of the poet Coleridge, and it had at least enough of a poetical character to be eminently unpractical. It sufficed to obscure for a time all that was excellent in the execution. . . . A great portion of the Cyclopædia

[11] The *British Controversialist,* January, 1862, p. 7.

[12] "History of Cyclopædias,"*Quarterly Review,* CXIII, No. 379 (April, 1863), pp. 354-387.

was, as it were, dug out of the ruins and re-issued in separate volumes by fresh publishers who acquired the property of the work, and thus distinctly recognised it as a mere quarry of valuable materials.

Without a doubt, there were fundamental difficulties inherent in the very scheme of the *Encyclopædia*. Some of them were evident to the editors by the time they were ready to publish the sections on metaphysics and theology: in trying to insert "every portion of human knowledge and every principle of human conduct in its natural position amongst first principles," they found that it was desirable to treat certain subjects historically.[13] The attempt to embody at one and the same time the advantages of a reference work and those of logically arranged complete treatises contained the seeds of almost inevitable failure. But in adopting the conception of the philosophic organization of the field of knowledge the *Encyclopædia* was forwarding tendencies bound to survive it by many generations, and prove the fertility of the idea.

ACADEMIC CURRICULA

Closely related to Coleridge's interest in an encyclopedia arranged according to a true philosophic idea, was his interest in the curricula of institutions of learning. Before his trip to Germany, which must have contributed largely to his philosophy of education, he had mapped out a course of study for a private class that he proposed to conduct on his return. In a letter to Poole, dated May 6, 1796, he wrote:[14]

> On my return I would commence a school for 8 young men at 100 guineas each—proposing to *perfect* them in the following studies in order as follows—
>
> 1. Man as animal: including the complete knowledge of Anatomy, Chemistry, Mechanics and Optics.—
>
> 2. Man as an *Intellectual* Being: including the Ancient Metaphysics, the systems of Locke and Hartley,—of the Scotch Philosophers—and the new Kantian System.
>
> 3. Man as a Religious Being: including an historic summary of all Religions and the arguments for and against Natural and Revealed

[13] Cf. Preface to 1845 edition, I, xvii.

[14] *Biographia* (1847), II, 363-366 (text corrected by B. M. MS, Add. 35, 343).

religion. Then proceeding from the individuals to the aggregate of individuals and disregarding all chronology except that of mind I should perfect them in 1. the History of Savage Tribes. 2. of semi-barbarous nations. 3. of nations emerging from semi-barbarism. 4. of civilized states. 5. of luxurious states. 6. of revolutionary states.—7.—of Colonies. During these studies I shoud intermix the knowledge of languages and instruct my scholars in Belles Lettres and the principles of composition.—Now seriously—do you think that one of my Scholars thus perfected would make a better senator than perhaps any one Member in either of our Houses?

His subsequent schemes for educating men for the bar, the senate, the pulpit, and other professions belong to the story of his manuscript logic,[15] which was, in part, the outcome of an informal study class.

A fascinating opportunity to work out a philosophically arranged course of study presented itself in 1825 in connection with the founding of the University of London. The question of a metropolitan university was, according to certain of Coleridge's informants, "stirring up the Mud-pool of the Public Mind in London with the vivacity of a Bottom wind," and he was ready to contribute his bit in the form of a series of lectures about which he asked Allsop's advice. The course was to consist of three lectures:

1. On the Histories of Universities generally, the most interesting Features in the history of the most celebrated Universities in Great Britain, Germany, France, &c. Reduction of all Universities of any name, with respect to their construction and constitution, to three Classes. 2. The Meaning of the Term, University, and the one true and only adequate Scheme of a University stated and unfolded from the Seed (*i.e.* the idea) to the full Tree with all its Branches. 3. The advantages, moral, intellectual, national, developed from reason and established by proofs of History; and lastly, a plan (and sketch of the *means*) of approximating to the Ideal, adapted and applied to this Metropolis. (N.B. The Plan *in detail,* salaries only not mentioned—the particular sums, I mean.) The obstacles, the favourable circumstances, the *pro* and *con* regarding the question of Collegiate Universities, etc. etc.[16]

Apparently he received too little encouragement to justify offering the course. Had the lectures ever been delivered or even

[15] See below, pp. 66 ff.

[16] Allsop, *op. cit.*, II, 209-212.

written out, they would have furnished interesting material for study. How Coleridge would have dealt with the current controversies reflected in such a tract as the anonymous *Observations on the Probable Failure of London University,*[17] we can only surmise, but it is safe to say that he would have endeavored to reconcile the pros and cons of the issues at stake, the very general question of democratic education and the closely correlated issue of the place of theology in education. The liberally progressive nature of his views on the project may be inferred from his comment on a seventeenth-century reform tract by John Hall. This *Humble Motion to the Parliament of England concerning the Advancement of Learning and Reformation of the Universities* Coleridge characterized as "a truly admirable memorial, *opusculum verè Baconicum*" adding, "It would be desirable to reprint this 'Motion,' dedicated to the founders of London University."[18]

How much actual influence Coleridge may have had on reform movements in education as they have expressed themselves in attempts to unify the field of knowledge—and as they are still expressing themselves in so-called "orientation courses" for university students—is at present a matter for conjecture. Coleridge's own influence and the influence of his German masters and cothinkers are almost inextricably intertwined. But the interesting account of "James Marsh and

[17] Published 1825. British Museum, 8364. bb. 16.

[18] *Notes Theological,* p. 197. A fair specimen of Hall's strictures on the traditional university education is reprinted with Coleridge's comment in the *Notes Theological.* His detailed suggestions (not reprinted) comprise what Coleridge would have recognized as an attempt at a truly philosophical survey of the field of learning, and the various subjects are handled with a common-sense psychology that must have been gratefully received. The treatment of logic will serve as an instance: "Moreover, Man that had solely the use of reason, and by it was separated from other creatures, I thought had all the interest in the world to endeavour the perfection of it, and the several wayes of its best advantages. And this I thought, was no better way attempted, then if the veynes of things were rightly and naturally cut up, and he had such principles placed within him, as would without any disturbance or confusion assist him in the pursuance of any Truth, or in the examining of any thing doubtfull. This I thought had been done by *Logick* (as they call it) but there the *Predicaments* were so untowardly ranged, that a mans minde shall not without some hesitation know where to fasten; and then when he hath pitched there, he is but engaged in a dispute. But I believe had the dissection been naturall, the minde would instantly have pitched right, and then have been inabled to have weilded that Notion to her best use." (*Humble Motion* [1649], p. 38.)

the New England Transcendentalists" published recently by Miss Marjorie Nicolson[19] is full of suggestions for a study of Coleridge's influence on American university education. According to Miss Nicolson, in 1829 the University of Vermont, whose "Creed" as late as 1845 contained as its climactic articles, "I believe in Coleridge! I believe in Professor Marsh!" issued a course of study based on thoroughly Coleridgean principles. She quotes from the pamphlet:

> If this course of study is carefully examined, it will be found to contain what no other collegiate study in the United States has so fully attempted. It seeks to give a coherence to the various studies in each department so that the several parts shall present, more or less, the unity, not of an aggregation nor of a juxtaposition, not of a merely logical arrangement, but of a *development and a growth,* and therefore, the study in it, rightly pursued, should be a growing and enlarging process to the mind of the student.

Miss Nicolson adds:

> Can one doubt that Marsh was a disciple of Herder and Coleridge? . . . It was not Marsh, but Herder, Jacobi, Schlegel, and Coleridge who reorganized the University of Vermont.

For a suggestion of the way in which Coleridge's thought was carried into one important field of academic education in England one may turn to Green's educational addresses delivered before the Royal College of Surgeons and other groups concerned with medical and surgical education. Several years before Coleridge's death Green had published a "Letter to the President of the College of Surgeons on the present state of the profession," under the Coleridgean title of "Distinction without Separation,"[20] and had delivered an address at the commencement of the medical session of King's College[21] on the relation of the various professions, especially that of medicine, to science. The latter was admittedly based on Coleridge's "Constitution of Church and State." The desirability of a broad liberal education, with firm grounding in science, as the basis of medical and surgical education, and the disastrous results of

[19] *Philosophical Review,* XXXIV (January, 1925), 28-50.

[20] London, 1831.

[21] "An Address delivered in King's College, London, at the commencement of the medical session, October 1832," London, 1832.

separating medicine and surgery, which should be recognized as merely distinct branches of one and the same science, were his themes. They were themes that were vital and timely. Of his more general educational lectures delivered after Coleridge's death, Campbell has said that the two Hunterian orations, "Vital Dynamics" and "Mental Dynamics," probably accomplished more in the way of expounding Coleridge's views than did his *Spiritual Philosophy*,[22] and a reading of the three works is bound to issue in an *a priori* agreement. A point on which definite evidence would be interesting is the question how much these addresses meant to the audiences before whom they were originally delivered. In the *Dictionary of National Biography* the following statements are made:

> As Hunterian orator at the College in 1841 he [Green] gave before a distinguished audience an address, eloquent, but difficult to follow, on "Vital Dynamics," being an attempt to connect science with the philosophy of Coleridge. Re-appointed Hunterian orator in 1847, he supplemented his former Coleridgean exposition with another equally incomprehensible to his hearers, on "Mental Dynamics; or, Groundwork of a Professional Education."

Nevertheless, the fact remains that he was appointed Hunterian orator, not once, but twice, and that he twice held the presidency of the College. John Simon, Green's authorized biographer, has told a different story of the King's College address of 1832:

> To the youths who then first heard Mr. Green, it was as the opening of a new world. The writer of the present Memoir was among them. . . . To him, though now nearly a third part of a century has since elapsed, the impression is still vivid that *there* was his momentous first perception of noble faculties being nobly exercised.[23]

THE ART OF TEACHING

Noah Porter, some dozen years after Coleridge's death, commented on his

> entire inability to comprehend or adapt himself to the minds of other men. The richness and force of his own mind, seemed to absorb him altogether, and to shed itself like a bewildering glare over every

[22] Campbell, *op. cit.*, p. 280.
[23] Memoir, Green's *Spiritual Philosophy*, p. xx.

man and thing which came near him. . . . It was only by slow experience, learned by numberless painful lessons, that he came at last to know, that all men were not like himself either in capacity or in teachableness.[24]

Corroborative evidence is easy to find, and it cannot all be traced back to De Quincey's immortal characterization of Coleridge's conversation. Yet Coleridge's theorizing on intellectual method and the field of scholarship was supported by a lifelong interest in the art of teaching. The difficulties with which he had himself to wrestle in trying to communicate ideas that demanded a new vocabulary and a new imaginative approach undoubtedly made him keenly aware that an art was involved. In addition, his fundamental principle of organic unity, unity with progression, implied the adoption of some clearly defined attitude toward whatever methods were employed to develop the individual mind, and there were interesting reforms on foot in England that engaged his attention.

The story of his enthusiasm for Andrew Bell's educational system, and his ill-advised participation in the Bell-Lancaster controversy, need not be re-told,[25] but a few passages from one of the less well-known records of this enthusiasm will call to mind the general grounds on which Coleridge's approval was based. In the *Athenæum* for March 13, 1909, Ernest Hartley Coleridge reprinted from the *Bristol Gazette* an account of a lecture that Coleridge delivered in Bristol November 18, 1813, on "The New System of Education." The following excerpts are characteristic:

In a state of progression the art is to begin low enough: if a boy cannot learn three lines, give him two, if not two, one, if not one, half: the level of capacity must be found. He here observed, that he ought, perhaps, before to have noticed the word Education; it was to educe, to call forth; as the blossom is educed from the bud, the vital excellencies are within; the acorn is but educed, or brought forth from the bud. In proportion to the situation in which the individual is likely to be placed, all that is good and proper should be educed. . . .

One beauty of the system is, that its means call forth the moral

[24] *Bibliotheca Sacra* (1847), IV, 117 ff.

[25] Cf. references in *The Friend,* the first "Lay Sermon," and various letters; also, *Lake Poets,* p. 226, note, and Turnbull, *op. cit.,* II, 34.

energies of action; not merely as relates to acquirement of knowledge, but to fill those scenes which Providence may afterwards place them in. It was a great error to cram the young mind with so much knowledge as made the child talk much and fluently: what was more ridiculous than to hear a child questioned, what it thought of the last poem of Walter Scott? A child should be a child-like, and possess no other idea than what was loving and admiring. A youth might devour with avidity without comprehending the excellencies of Young and Gray; the Lecturer himself recollected the innocent and delightful intoxication with which he read them; the feeling was as necessary to a future Poet, as the bud to the flower, or the flower to the seed. . . .

The Lecturer concluded with recommending an observance of the laws of nature in the Education of Children; the ideas of a child were cheerful and playful; they should not be palsied by obliging it to utter sentences which the head could not comprehend nor the heart echo; our nature was in every sense a *progress;* both body and soul.

Education, properly adapted to the probable needs and opportunities of the individual, should be available for everyone, Coleridge held; this education must adapt itself to the stage of development already attained by the pupil[26] and gradually educe and train his latent powers and interests; finally, intellectual and moral education must not be divorced. Bell's system he elsewhere commended as one "by which in the very act of receiving knowledge, the best principles and most useful qualities of the moral character are awakened, developed, and formed into habits."[27] All knowledge, he argued, should reappear as power. This last principle doubtless meant more to Coleridge than it did to Bell, since it was part and parcel of his doctrine of ideas as involving the whole man, the will as well as the intellect, and his doctrine of self-consciousness.

Believe me [he wrote in 1827 to the nineteen-year-old James Gillman],[28] it is no musty old saw but a maxim of life . . . that He alone is *free* and entitled to the name of gentleman, who knows himself and walks in the light of his own consciousness. But for this reason nothing can be rightly taken in, as a part of a liberal education that is not a means of acquainting the learner with the nature

[26] On this point see Coleridge's rule for instructing by dialogue, below, pp. 60-61.

[27] *The Friend* (1818), Vol. II, Essay 3, 68.

[28] Lucy E. Watson, *Coleridge at Highgate* (1925), pp. 127 ff.

and laws of his own mind—as far as it is representative of the human mind generally. By knowing what it ought to be, it generally becomes what it ought to be! and thus the man's *ideal* mind serves for a chronometer by which he can set his own pocket-watch, and judge of his neighbour's. . . . All knowledge, I say, that enlightens and liberalises, is a form and a means of self-knowledge, whether it be grammar, or geometry, logical or classical. For such knowledge must be founded *on principles* and those principles can be found only in the laws of the mind itself.

But the letter should be read in its entirety, with its concrete illustrations, or it will seem to indicate that even in 1827 Coleridge had not yet learned "to adapt himself to the minds of other men." Taking it in its entirety, however, one can readily believe that it hit its mark, especially if the recipient took to heart the concluding admonition, "Read over this till you understand it. God bless you." Incidentally, Coleridge has left us no better statement of the organic unity of "the several knowledges and attainments, which it is the object of a liberal education to communicate and prepare for," than is to be found in this same letter.

So much for the theories that won his adherence. With regard to actual performance, the case for Coleridge is stronger than it appears when one thinks, for instance, of the twelfth chapter of the *Biographia*. Unpublished manuscript material gives striking evidence of the patience with which Coleridge tried to practice what he preached, in the way of leading the student on, simply and naturally. Time and again he resorted to the simplest possible language and the simplest possible illustrations to explain and make real what might easily remain a barren formula, whether his subject is the mechanism of syllogistic reasoning, a point in Kant's transcendental analysis, or the development of Greek philosophy. His use of the historical method was in part a deliberate attempt to vitalize the formal. Some of these didactic manuscripts originated in Coleridge's talks with—or to—his pupils, and in others he has adopted the style of such informal face-to-face instruction.

Of his published work, it must be said, moreover, that many times it succeeded in stimulating real thought even when the argument as a whole was confusedly involved and difficult to

comprehend.[29] The words that Coleridge used were weighted with a meaning that was contagious and that worked its way into the consciousness of his hearers, often with but little aid from his attempts at more systematic exposition. He succeeded time and again in accomplishing what was his primary educational purpose, the stimulation and guidance of reflective thinking.[30]

A characterization of Abernethy's power as a teacher, written by his pupil and biographer, Macilwain, contains much that was equally true of Coleridge at his best, and its inclusion here is the more pertinent because the common application is not the result of mere coincidence. Abernethy and Coleridge were both imbued with the power of a dynamic idea that was capable of vivifying thought in every department of life, and lending to the most prosaic details a significance that was communicable even when scarcely articulate.

> . . . In teaching, the object is not merely to convey the idea, but to give a lively and lasting impression; something that should not merely cause the retention of the image, but in such connection as to excite another process, "thought." . . .
>
> No man, we believe, ever exceeded him in the skill he possessed in conveying ideas from one mind unto another; but he did a great deal more—he sent those who really studied him away thinking, and led them to work with a kind of pleasure, which was in some sense distinct from any merely practical or professional interest.
>
> He contrived to imbue you with the love of philosophical research in the abstract, with an interest in truth for its own sake: you found yourself remembering the bare facts, not so much from conscious effects of memory as from the interest suggestive of observations with which they were so frequently associated. We know not how to express the effect they produced; they seemed to give new pleasure on repetition, to purify your thoughts scarcely less than they animated your onward studies.
>
> In studying their more suggestive passages, you would now and then feel surprise at the number and variety of important practical relations arising out of a single proposition.[31]

Coleridge would have accepted such remarks as characteriz-

[29] Existing manuscript fragments give striking evidence of Coleridge's struggles to achieve clarity in the more difficult passages of his writings.

[30] Cf. prefatory remarks to *The Friend* (1837), and *Aids to Reflection.*

[31] *Memoirs,* pp. 253, 281.

ing the ideal teacher, and more than one of his pupils and readers would gladly have applied them to him. However often he may have failed, he was qualified by his own experience as well as by his familiarity with theories and methods, to talk about the art of teaching. His work as a logician gave him ample opportunity to do so, and also to try his own hand at a pedagogical task that demanded all the skill he could muster.

THE LOGICIAN

Let no one think that it is nothing to accustom people to give a reason for their opinion, be the opinion ever so untenable, the reason ever so insufficient. A person accustomed to submit his fundamental tenets to the test of reason will be more open to the dictates of reason on every other point.

John Stuart Mill, "Coleridge," 1840.

Now, my Friend! if you have walked with me so far only for company's sake or by way of a little exercise and change of air . . . accept my thanks, and make the best of your way home: For this is no safe landing place to loiter on. But if you joined me with any serious intention of sharing in the adventure, now is the hour for you to reconsider the matter and not to determine on the undertaking without having first learnt what it is that you are doing and what you will have to do.

Coleridge, Unpublished Manuscript (See Appendix B, p. 153).

THE EARLY ATTEMPT AT AN ORGANUM

AMONG Coleridge's many statements of his projected *opera magna,* there is a letter to Godwin, dated June 4, 1803, that offers invaluable material for any history of his interest in logic. The letter was first published in *Macmillan's Magazine* for April, 1864, then again in C. Kegan Paul's *William Godwin,* 1876, and was included by Turnbull in his *Biographia Epistolaris* as letter No. 119. I quote from Turnbull's text.

I am now . . . ready to go to the press with a work which I consider as introductory to a *system,* though to the public it will appear altogether a thing by itself. . . . I entitle it *Organum Verè Organum,* or an *Instrument of Practical Reasoning in the Business of Real Life;* to which will be prefixed, 1. A familiar introduction to the common system of Logic, namely, that of Aristotle and the Schools. 2. A concise and simple, yet full statement of the Aristotelian Logic, with reference annexed to the authors, and the name and page of the work to which each part may be traced, so that it may be at once seen what is Aristotle's, what Porphyry's, what the addition of the Greek Commentators, and what of the Schoolmen; 3. An outline of the History of Logic in general.* . . . Then follows my own *Organum Verè Organum,* which consists of a Σύστημα of all *possible*

* This outline of the History of Logic was to consist of twelve chapters, which I list in somewhat abbreviated form: 1. The Origin of Philosophy in General and of Logic *speciatim.* 2. The Eleatic and Megaric Logic. 3. The

modes of true, probable, and false reasoning, arranged philosophically, *i.e.* on a strict analysis of the operations and passions of the mind in which they originate, or by which they act; with one or more striking instances annexed to each, from authors of high estimation, and to each instance of false reasoning, the manner in which the sophistry is to be detected, and the words in which it may be exposed.

The whole will conclude with considerations of the value of the work or its practical utility in scientific investigations (especially the first part, which contains the strictly demonstrative reasonings and the analysis of all the acts and passions of the mind which may be employed to the discovery of truth) in the arts of healing, especially in those parts that contain a catalogue, etc. of probable reasoning; lastly, to the senate, the pulpit, and our law courts, to whom the whole—but especially the latter three-fourths of the work, on the probable and the false—will be useful, and finally, instructive [ions?] how to form a commonplace book by aid of this Instrument, so as to read with practical advantage, and (supposing average talents) to *ensure* a facility and rapidity in proving and in computing [confuting?].

In another letter to Godwin, written a few weeks later in reply to his criticism of the proposed volume, Coleridge stressed the practical nature of the work (No. 120, July 10, 1803):

. . . Though I detailed the whole of the contents of my work so fully to you, I did not mean to lay any stress with the bookseller on the first half, but simply state it as preceded by a familiar introduction, and critical history of logic. On the work itself I meant to lay all the stress, as a work really in request, and non-existent, either well or ill-done, and to put the work in the *same class* with *Guthrie* and books of practical instruction—for the universities, classes of scholars, lawyers, etc. etc. Its profitable sale will greatly depend on the pushing of the booksellers, and on its being considered as a practical book, *Organum verè Organum,* a book by which the reader is to acquire not only knowledge, but likewise *power*. I fear that it may extend to seven hundred pages; and would it be better to publish the Introduction and History separately, either after or before? . . .

Platonic Logic. 4. Of Aristotle, "containing a fair account of the Ὄργανον. . . in as far as the account had not been anticipated in the second part of my work." 5. Of the Truth and Value of the Aristotelian System of Logic. 6. On Aristotle and Plato as Philosophers. 7. Raymund Lully. 8. Peter Ramus. 9. Lord Bacon, or the Verulamian Logic. 10. Examination of the Verulamian Logic and Comparison with the Logic of Plato. 11 (numbered again "10"). Descartes. 12 (numbered "11"). Condillac.

The detailed synopsis should be read in the complete text.

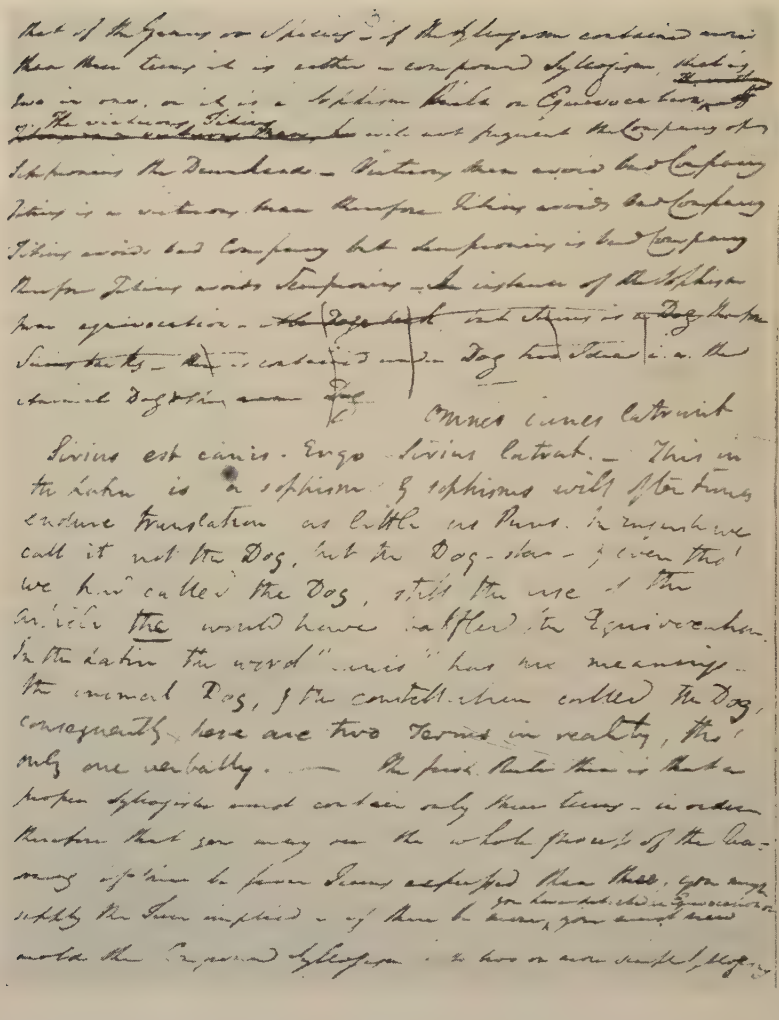
Commenting on the first letter, Paul wrote:[1]

> It is not now possible to find any trace of the work sketched by Coleridge in the following letter, which is certainly not to be identified with any actually published. Were it not that he says he is "ready to go to press," it might be supposed to have had existence only in his teeming brain. Yet a MS. so remarkable and so valuable, if it really existed, can scarcely have been lost or destroyed.

Turnbull, however, noted: "Extant in MS. See *Athenæum,* 26th October 1895." The work referred to in the *Athenæum* of this date is the two-volume manuscript "Logic" once owned by C. A. Ward and now in the British Museum (Egerton 2825, 2826), and a very cursory inspection of this "Logic" is sufficient to show that it is not the work outlined above, though it may represent a later development of ideas germinating in 1803. Turnbull was at least partly right, nevertheless, in stating that the work was extant in MS. For in the possession of the Coleridge family at Leatherhead is a partly filled notebook[2] that contains a section of the "familiar introduction to the common system of Logic," the first four chapters of the History, and a part of the fifth chapter. Moreover, the text offers clear evidence that the continuation of the manuscript was to follow in general the outline for the remaining chapters sketched in the letter to Godwin.

The notebook was probably purchased by Coleridge some time before 1803. It bears the label of the printer who was associated with Cottle in publishing the *Lyrical Ballads,* "N. Biggs, Printer, Bookseller and Stationer, Opposite the Drawbridge, St. Augustine's, Bristol." The Bristol city directories for the years 1795-97 show that during those years there was located on St. Augustine's "Back" or "Parade" the establishment of "Nathaniel Biggs, Printer and Bookseller. In later directories, after 1798, the firm appears as "Biggs and Cottle, Printers." It is likely, then, that Coleridge purchased the notebook before 1799. As for its contents, the entries may well belong to different dates. Some fragments of verse, in autograph, suggest Coleridge's early poetical period:

[1] C. Kegan Paul, *William Godwin* (1876), II, 92.
[2] MS A.



A PAGE FROM THE "BRISTOL NOTEBOOK," WRITTEN IN PART BY AN AMANUENSIS AND IN PART BY COLERIDGE HIMSELF (LL. 12-22)

Stretch'd on wild herbs beneath the greenwood shade
Pursue the echo—In Heaven's white cloathing drest—
The World—Whose going forth was from eternity.[3]

An autograph list of books, largely theological, which may have been copied down from some bookseller's catalogue as *desiderata* offers no definite evidence of date; nor does a recipe for a paste to use on a razor strop![4] With the exception of some autograph insertions and several autograph pages on Aristotle's logic, the bulk of the manuscript, i.e., the work on logic, was written by some amanuensis, whose identification might help in dating the fragment. But only negative evidence on this point is available as yet: the amanuensis clearly was not Green or either of the copyists responsible for the two-volume logic (Egerton 2825, 2826) that took shape during Coleridge's years at Highgate. The fragment must, then, be tentatively assigned to 1803, the date of the letter to Godwin.

The manuscript begins in the middle of the introduction to the common system of logic, with a discussion of generic ideas, leading into an attempt at a common-sense explanation of syllogistic reasoning. Kant's influence is suggested in the handling of the syllogistic figures, but on the whole the consideration of reasoning as classification is not in the spirit of the critical philosophy. Hints of dissatisfaction with the existing system—hints which were to be enlarged on in a later section of the work—point toward some such fundamentally critical logic as Coleridge tried to work out later, relying in no small measure on the contributions of Kant.

The introduction is by no means a conventional treatise on logic, even though it does not show the inspiration of the critical philosophy. It is marked by a characteristic endeavor to explain the formal in terms of the humanly important, and, where this is impossible, to discard the formal. Coleridge's answer to those who state that all reasoning is made up of identical propositions is a case in point:

How far they speak truly you yourself have seen. Still, however, it appears to me a wanton abuse of language, for tho' in every Syl-

[3] Third page from the back, volume inverted.

[4] For the contents of the notebook, other than what are given in full in this chapter, see Appendix A.

logism I do in reality repeat the same thing in other words, yet at the same time I do something more; I recall to my memory a multitude of other facts and with them the important remembrance that they have all some one or more property in common. The phrase Identical Proposition should be applied exclusively to those propositions which occasion in the mind no recapitulation and as it were refreshment of its knowledge and of the operations by which it both acquires and retains it. If you could take away from the human mind the power and the habit of classing its experiences according to its perceptions of likeness you would sink it to the level of the brutes, in all probability far below brutes—Whatever therefore keeps alive this habit and intends to invest it with a mechanic facility cannot be said to be barren of good effects. Now Identical Propositions are likewise called barren propositions, and should therefore be confined to such as are indeed barren—If A is A. A is A. But A is A. Therefore A. is A.[5]

His conclusion to the introductory section leaves one in no doubt as to his satisfaction at having it over with. Many of the accepted subtleties regarding syllogistic reasoning seem to him, he confesses, "a mere Farrago of hard Names, a list of Classification where Classification can answer not one wise purpose, where in short Class itself can never be mistaken while the logical exponents or technical phrases expressive of the Classification will never be remembered." He passes on with delight to his historical section, "preferring the historical mode of explaining terms which can have no interest unless historically considered."

OUTLINES OF THE HISTORY OF LOGIC[6]

CHAPTER I. OF PHILOSOPHY IN GENERAL

Imagine to yourself the [a?] small number of pleasant cities with squares, public gardens and covered walks, all speaking one common language but each city an independent state and a Republic. Add to this a genial climate, sanguine constitutions, and the practice of duelling, we will suppose, utterly unknown. Each separate city indeed we may conceive as all too ready to act on its neighbour Republic by the terror of arms, but the citizens of each Republic were in the habit of using towards each other no other weapons than those of argument and persuasion. All these little states are governed nearly in the

[5] See Appendix A, p. 143.

[6] MS A, pp. 18-39.

same way by one great common council in which every adult male being a freeborn citizen has an equal right to deliver his opinion and to give his vote. In each little Republic the jealousy of its neighbours and the spirit of rivalry, ambition and revenge will not fail to produce a constant succession of important subjects for public debate—peace and war, defeat and victory, treaties made and treaties broken, election of generals and officers of state, impeachment, defence, punishment, remuneration. You will agree with me I think that the inhabitants of these little Republics could scarcely fail of becoming an argumentative, perhaps a disputatious, certainly a talkative race. When there happened to be no public news they would debate on subjects of a more private or a more general nature and whatever they conversed on their conversation would be marked by the lively manner, the eagerness and the argumentative cast which their public assemblies would have formed into a habit and second nature with them. In such a small state too the characters of men and consequently the knowledge of the springs and of the consequences of action would become of real and practical importance to each individual—these of course would form the subjects of frequent discussion in their public walks and porches. Some loud talker would often gather around him an increasing audience, each of whom would feel the right and not want the inclination to interrupt and question the main speaker. This sort of public disputes, arising thus accidentally, would among this lively and good-natured people form as frequent sources of amusement as among us a boxing match in the streets, or rather, to bring an instance less disgraceful to our national manners, think of our zealous field preachers and the audiences they collect around them, and instead of uninterrupted declamation conceive animated and pertinacious dialogue. From discussing the characters of their magistrates or generals, of their rich men and their parasites, they would by the very nature of the human mind and of human language be soon led to think of action in general, to generalize, to classify. This source of amusement, once discovered, would become no doubt a favourite amusement with the more refined and peaceable citizens, while the turbulent and the coarse would crowd to the exhibition of defamatory farces or defamatory harangues. Such citizens as eminently gratified the former would be designated by some honorable name, and by what name more appropriately than by that of Philosophers or men who loved general truth without reference to personal attachment or personal hatred. Citizens who excelled in gratifying the baser passions would soon have their distinguishing title, Satyrists, Comedians or Agitators. Thus in our imaginary Republic we have already arrived at the origin of Moral Philosophy and Moral Philosophers.

We will now, if you please, imagine a very much larger multitude of men under a government purely and intensely despotic; one man sends out laws and the remaining myriads learn and obey them. Here men are acted upon incomparably more often and with incomparably greater intensity than they act. Of course they would attach little importance to themselves considered as the inhabitants of a particular state, little importance to their countrymen in general. The officers of state, military and civil magistrates, would indeed be necessary but they would all be the mere representatives and symbols of the one despot. As the Jews had different names for the Supreme Being, differing from each other in sanctity and awfulness yet all expressing the same Being, even so in this Empire each and every Magistrate and Grandee would be as it were only a name more or less awful of the supreme Magistrate. This one man would indeed become of infinite importance to the whole community, but his agency would be of so unvaried a kind that it would never become the subject of active thought; so unvaried, so terrific and so exceedingly disproportionate to human agency in general that it would either preclude thought, which grounds itself on Analogies and the Classification of facts by their Resemblances, and lead inevitably to Superstition, which consists in the prostration of the mind before an unanalysed anomaly. Under a government such as we have been imagining Man would more often consider the action of Nature upon him than of Man, of the plants of Nature, of the heavenly bodies. His thoughts on these would be characterized however by the gloom resulting from the aforementioned anomalous human agency. He would imagine spiritual powers residing and acting in inanimate forms, a ghostly Bashaw in every plant possessing or imagined to possess unusual powers; a Sultan in every star, and all subjected to one supernatural Caliph omnipresent in his influence by an unlimited and invisible espionage. Still, however, to generalize, to classify, belongs to him as a man whether he be the slave of a Despot or the free citizen of a happy Republic. The facts and phenomena of Nature with all the appendages of superstition would soon be classified, and thus we have arrived at the origin of Magic, Theosophy and Cosmogony. By Magic, we understand a system of powers residing in inanimate objects and of the fanciful means which were supposed capable of calling them into action; by Theosophy a system of intelligent spirits, malignant or gracious, believed to reside in the objects of sense and considered as the cause of the powers which we experience and on a proper solicitation of powers incomparably greater; by Cosmogony a system of the origination of all things, including an explanation of their present state. Let us suppose a series of benevolent and virtuous

Despots. A portion of Republican security will be felt, a portion of Republican activity excited, but it will be naturally excited on the old stock of Ideas, and still from the essential nature of Despotism the characters and actions of Men will be less interesting than the phenomena of Nature and of their supposed supernatural causes—Magic and Cosmogony would gradually improve into a more rational system of Chemistry, the Arts of Healing and Astronomy and Theosophy would rise into grand, simple and awful contemplations respecting the Deity* in his relation to Man and Man in relation to Deity. You will have perceived that in the disguise of a supposition I have shadowed out to you the real history of the origin of Moral Philosophy in Greece, of Theology and Natural Philosophy in Egypt and India. The early Sages of Greece were Natural Philosophers and Mythologists for they were the importers of Eastern Philosophy and if we may allow ourselves a play upon words, Philosophers in Greece rather than proper Grecian Philosophers. Ethics and argumentative Metaphysics were the offspring of democracies whom superior courage and superior intellect had rendered victorious over Despots, to whom victory had given a season of security and whom industry, genius and public spirit had placed in the possession of comforts and elegancies.

I observed that you smiled when I traced the origin of Moral Philosophy out of the talkativeness incident to petty Republics in a cheerful climate. In the present day it is possible that the individuals who talk least may think most but this must not be extended to nations in the ruder period of the human race and while language is as it were still under the potter's wheel. General talkativeness will mould the common language and give it strength, harmony, flexibility and copiousness even to the expression of the finest shades of meaning. Such a language may easily be made an instrument of deceit as well as of truth to a degree of which those languages must need be unsusceptible in which, as in most of the Oriental, the forms of connexion are few and simple and express merely annexment and disjunction, not the niceties of cause and consequence, division and exception. You cannot fail to see how great an influence this must have on philosophy in general, but it leads us at once to the particular subject of our present historical disquisition. Among a talkative

* Note—The natural pride and the instincts of hope receiving little or no gratification in their present state under a despotism, the great mass of the inhabitants will be impelled to look forward beyond the grave. The doctrine of immortality is natural to man, it will be therefore common to republics and to despotism but the importance attached to the doctrine will be found, independently of imitation at least, incomparably more intense in the latter than in the former.

people a great number will talk idly. Idle-talking will be felt as an evil and the opposite excellence acquire an additional value from the contrast. When men have already generalized on their actions and thoughts, they will be induced by their scorn of the evil to generalize on Discourse likewise; in other words as they had previously directed their attention to good and bad actions and had with more or less success reduced their characteristic differences to General Rules they would now find it convenient to make the same attempt with good and bad conversation and to reduce to General Rules the characteristic differences of rational and irrational, of true and deceptive, forms of connection. This is Logic and this would be the origin of Logic. In a Democracy, where the varieties of character and moral habit find sufficient space and free playroom, some men will gain a distinct and honorable name as teachers of truth. Others from rivalry and the mere lust of distinction will exert their ingenuity in starting verbal objections calculated merely to perplex conversation and in no wise to affect the inward conviction unless indeed where vicious habits literally decayed the intellectual faculties and moral feeling. The first class as I have already told you were called Philosophers, the second, Sophists. These were considered as irreconcilable enemies. The Philosophers, and indeed all wise and good men, considered Sophists and Sophistry as an evil and a nuisance and Logic was invented as the proper amulet, as the specific medicine. But as weapons originally invented for defence may be converted into weapons of offence, so Logic in its imperfect state proved an Implement still more convenient to the Sophist than to the Philosopher. After the Battle of Chæronea when the forms and habits of Grecian Democracy remained but all the great and practically important subjects of discussion were removed from their popular assemblies, the public mind became proportionally enfeebled. The Greeks, always great debators, now found their best amusement in incessant verbal disputation, the Sophists threatened to gain the upper hand, and for the specific purpose of preventing this evil Aristotle composed a more efficient Logic, his Organon, which in all essentials contains the system in present use, in the schools and universities of Europe, excepting those of Republican France where it has been made to give way to the Logic of Condillac.* I propose to draw out a sketch of the contents of this extraordinary work, but that you may be enabled the better to decide on the degree of genius requisite for its production it will be necessary for me to prefix some account of Logic as it

* Note. It would be more accurate perhaps to say that the study of logic altogether is exploded in France, for Condillac's book is rather psychological than logical, but of this hereafter.

existed before Aristotle under the different names of the Eleatic, Megaric and Socratic Logic. The permanent value of the work will be a subject of direct and separate discussion; but this question will be illustrated, no doubt, by a history of the attempts made to improve it by Lully, Ramus, Lord Bacon and Descartes, and last of all by Condillac. We shall answer two purposes by this; we shall make ourselves acquainted with an important part of philosophical history and at the same time impress upon our memory, and learn the habit of applying the rules of that art, the history of which we are attempting to detail.

Few disputes in philosophical history have been more trifling than that respecting the invention of Logic and whether the honour is due to Parmenides or the Eleatic Zeno. Zeno of Elea, a city of Magna Grecia, flourished about [?] B.C. and was the scholar of Parmenides, who flourished about 505 B.C. If it were not too absurd to consider Logic in the Eleatic sense as having been invented by any one, we might fairly divide the honor between the master and the scholar and put an amicable conclusion to this important controversy. The characteristics of the Eleatic Logic have been preserved to us by Proclus in his Commentaries on Plato and by Laertius the Biographer. His Art of Logic consisted of three divisions, viz. of Consequences, Colloquies and Debates. His rule for the Deduction of Consequences was the following. Put any question or position—for instance, Was Zeno the inventor of Logic? You may either assume the affirmative or the negative, by which assumption there arise two hypotheses—if it be so and if it be not so, for an assumption is only a supposition in the disguise of an assertion. To each of these suppositions there would attach three sorts of consequences, to wit, what may be deduced from them, what cannot be deduced from them, and what can be deduced in respect of one thing and what cannot in respect to others, as it may be deduced that I am a tall man with respect to David, though a short one with respect to Goliah; the same being applied both ways to the negative as well as to the affirmative, you thus gain six sorts of consequences; and because you may look at each of these in four different aspects—of the thing in respect to itself, of the thing in respect to others, of others in respect to the thing, and fourthly of others in respect to themselves—there arise of the whole of course twenty-four sorts of consequences. I will not employ your time so idly as to give you instances—it is sufficient to observe that this is called the Eleatic Method. Its manifest purpose is to prevent precipitate and premature assertions —a sort of technical direction to the understanding, how it may see any given subject in all its bearings, without which there can

be no assurance of accuracy in deduction. The next division is that of Dialogue or Colloquy—Dialectic, Dialogic or Dialogistic art, i.e. the art of arranging your thoughts well. Zeno no doubt was well aware that though it might be very serviceable to look at each subject in twenty-four bearings in your own mind, it would be very ridiculous bona fide thus to subdivide when you were talking with others. This Dialectic Art, the rules of which as given by Zeno have not been preserved to us as far as I can discover, became however so fashionable and was indeed so well adapted to Republican manners that almost all Philosophy was exhibited in Dialogue, a circumstance which at times gives an excellent grace to the writings of Plato, but too often a prolixity which not only wearies out the audience, but perplexes and bewilders it. When well conducted it seems to me the best manner of introducing truth into the mind, but after the first elements have been taught, and the scholar's mind finds itself at ease with the terminology and the forms of reasoning, I should prefer the Aristotelian method improved by a greater richness of illustration. In weighing the advantages and disadvantages of Dialogues, do not suffer yourself to be misled by the vulgar schoolbooks, histories, and religious tracts in the Dialogue form. These are not Dialogues, but dull exhibitions of a sort of Ventriloquism. One man is speaking all the while, but every now and then he alters his voice into a semi-squeak and would fain make it appear to proceed from some doll or man of straw at some little distance from it. To instruct in the form of dialogue the one great rule is the following: Remember your own state of mind when the subject was new to you—the different passions of premature contempt, undue admiration, imaginations that you had understood what you had not or had only imperfectly understood, your objections, your difficulties—place these in actual language in the mouth of the scholar and answer them as naturally in your own character and present state of mind and you will have formed a true Philosophical Dialogue for the purposes of instruction which does not require the representation of different characters, but of the same mind in two different states made co-present by the natural fiction of two persons, the one actually in that state in which the other must formerly have been if we take minds at their averaged degree of power. There does not exist a more important rule nor one more fruitful in its consequences, moral as well as logical, than the rule of connecting our present mind with our past—from the breach of it result almost all the pernicious errors in our education of children and indeed of our general treatment of our fellow creatures. It is indeed the only cure of uncharitableness, intemperate expectation

and feelings of Positiveness imposing themselves on the mind for a sense of Certainty.

I have digressed but I perceive that you have more than pardoned me. This Dialectic Art or mode of question and answer became so popular that all reasoning was called questioning and our great Verulam tells us, Prudens interrogatis dimidium scientiæ—Put a question well and you already know half the subject.[7] St. Paul's words are to be understood, I believe, in his Epistle to Titus, "Avoid foolish questions and contentions," the term questions and contentions being the common name of the Eleatic method, which was called ἐρωτητικὴ καὶ ἐριστική, the art of Questions and Contentions. It degenerated indeed into a mere game of Sophistry, and afterwards when formal Syllogisms became fashionable, they were still put as questions. Thus Lucian derides a man, who wrote a history in which from the beginning to the end συνερώτησε τοὺς ἀναγιγνώσκοντας he addressed a series of syllogistic questions to his readers. As an instance of the form and type of these questions take the following—the older the better, for I trust there are few of a modern date—Whatever you have not lost, do you possess it or do you not possess it? If the Respondent said, I possess it, the Rejoinder was, but you have not lost a pair Horns from off your head, have you? This of course being admitted—Hence you still have Horns on your Head, have not you? If on the other hand the Respondent said in answer to the general question, I do not possess it, it was then assumed—But you have not lost your Eyes have you? And this being admitted, Of course then you have no eyes in your Head—Eh?

We have already arrived at the Eristic or Art of Contention, or rather we have passed beyond it into the Sophistic or art of intentional deception. Time has played us here one of his common tricks —let the birds fly out of his cage and brought us only the dung and the litter. You are not to suppose that this contentious art was confined to mere playful perplexing of schoolboys as at a Christmas game—it was used seriously to disturb and confound our simplest and plainest convictions both in Physics, Ethics and Psychology. Aristotle gives himself no little trouble in the 6th and 7th books of his Physics in proving that Zeno had reasoned awry—παραλογίζεσθαι and in detecting the *Paralogism,* the strict meaning of which is that the reasoner has slipt, imperceptibly perhaps, out of his [road?], and while he appears to be reasoning on one thing is actually reasoning on another. I will not here detail the Paralogism attributed especially to the Eleatic School as in the account of the Logic of

[7] For other citations of this maxim see *The Friend* (1809-10), p. 77; (1818) III, 205-206; *Table Talk,* October 8, 1830; and *Works, passim.*

Aristotle I shall endeavor to make a complete catalogue of all the species of false reasoning, intentional or unintentional, as far as the same were noticed by the Ancients. This Art was divided into two parts according to the moral intention of the person who used it—if it was used merely to make the disputant feel the existence of a certain difficulty, of some apparent incongruity between our knowledge and the deductions of our understanding, it was considered as legitimate and was stiled Eristic. Thus, we know that certain things move—Motion of course is a part of our positive knowledge—but there arose difficulties in understanding the possibility of Motion and these difficulties have been felt in all ages, whether they arise from some latent false assumption or by mere undetected equivocation, or by a false classification of the phenomenon, or from all together. Still it is right to make the difficulty if it really exist—to arise and walk up and down the room, as Diogenes is said to have done, would be grossly to mistake the subject in question and was no better reasoning than that of a child would be, who riding in a carriage and being told that the objects which they passed did not really move, should fall a laughing and point to the hedge in triumph. The knowledge of the Phenomenon was never disputed but whether it was or was not congruous with the general Laws of our Understanding to attribute to the Phenomenon any existence but that of our perception. The Eristic art therefore may be considered as an instrument for the purpose of detecting the imperfections of our apprehensions and of the language adopted as the exponents of them. In this sense we may perhaps stile the Hylas and Philonoüs of Bishop Berkeley as a masterpiece of the Eristic Art. It is a work which can never be confuted but by a real improvement in our intellectual apprehensions and philosophical language; consequently he who has given occasion to that improvement must be considered a benefactor of his species. Of the Sophistic Art we have already given a full explanation. Its triumphs are uniformly those of cunning over ignorance, though as habitual lyers do at length believe in their own lies, a Disease in the Moral Will almost always ending in a correspondent Disease in the Intellectual Faculty, so it may happen to Sophists, they may at last be deceived by sophisms which are the ridicule of children and of women. We may illustrate it not unamusingly by figuring to ourselves an impostor cutting and painting paper so as to represent fetters of iron, shall at last turn hypochondriac and be really bound by chains which would not resist the struggle of a baby's limbs. Simplicity finds no difficulty in escaping ex istis vinculis, dum interim illi ipsi qui usi sunt, in iisdem manent irretiti; atque experiemur acutissima quaeque sophismata neminem fere umquam pura mente

utendum, sed ipsos sophistos fallere consuevisse (Cartesius). From the nature of the subject you will have concluded that the two terms Eristic and Sophistic are by no means kept uniformly distinct from each other, and as for one Zeno we may expect a hundred Gorgiases, a swarm of Sophists for one Philosopher, we must expect that the bad meaning will become the most common, and I ought to notice to you that Aristotle himself does not observe the distinction which I have detailed to you but defines a Sophist by an Eristic Syllogism.

Of the Megaric Logic—The great Socrates is said to have been an auditor of Zeno, the Founder of the Eleatic School of Logic, and entitled the Founder of Logic itself, and Xenophon assures us, and Plato in almost all his dialogues affords proof, that Socrates was and had the character of a great dialectician. To this point he obtained the suffrage of Chrysippus himself who you will remember was considered by the ancients as Logic incarnate. ὁ διαλεκτικώτατος. However as we have none of his own writings we must found our opinion of his stile on those of his disciples, chiefly of Plato, subject however to very great deductions from the Platonising spirit of Plato's genius. Of the other scholars of Socrates we hear of a celebrated Athenian Tannai, who wrote Dialogues concerning Pure Science, the Law of Judgements, and expressly concerning the Dialectic Art—of Simmias the Theban who wrote Dialogues concerning the Laws of Reasoning, and of Crito the intimate friend of Socrates, who is said to have been the author of a Treatise containing the Canons of Learning and Teaching. These however are to us the mere ghosts of great names. No particulars have reached us relative to our present disquisition of any of the disciples of Socrates excepting Euclid of Megara and of Plato. You must not confound this Euclid with the famous Geometrician who was likewise of Megara but posterior to the Founder of the Megaric Logic just 100 years. Of this elder Euclid we know nothing indeed but that he was the Founder of the Megaric school and of the Megaric school nothing but that it was the celebrated manufactory of worthless Sophisms. Of Euclid himself two particulars only are narrated; the first that he neither assumed nor questioned, but taking for granted the preceding steps of argumentation reasoned by a congeries of conclusions, and from his vehement manner of repeating Ergo, Ergo, Ergo, panting for breath and foaming at his mouth like the young logician in Gil Blas he received from Timon the nickname of "the logical Mad Dog." The other circumstance is something more to his honor—he is said to have been the first who opposed the lax method of reasoning by similes, which as far as they are truly alike, he considered as mere repetition and wherein they did not quadrate as impertinent and as they have been

humorously stiled "the Efflorescences of Garulity." Eubulides, the Sucesssor of this Euclid, appears to have signalized himself only by the Invention of Sophisms, a sad imitator of the Eleatic Zeno, one of whose celebrated arguments respecting motion was called Achilles from the illustration contained in it from the swift-footed hero and the tortoise. In like manner the most worthless Sophisms of Eubulides were each christened as some of our law writers are, by some one or two remarkable words contained in them. We have occasion to detail these hereafter—I shall now only mention their names, which were: "The Lyar, the Deceiver, Electra, the Man in a Vale, the Heap, the Horns, the Baldhead." This sort of conundrums became fashionable among the Stoics—from what causes I cannot explain. As they were very profound reasoners I have sometimes thought they might have adopted some of them as amusing instances of the reductio ad absurdum and others as lively instances of the Equivocation—we know what preëminent importance they attributed to Language, and it is possible that what their Enemies relate of them in general and as a serious part of their Philosophy were nothing more than tryals of stile among their young catechumens. They certainly were well adapted to answer the purpose as they all contained gross and palpable absurdities while that abuse of language by which they were cloathed in the dress of reason and argument was not gross or obvious. This is all we know of the Megaric school and I availed myself of the permission of the critics, who allow us [to] digress when that subject is [?].

[Of the Platonic Logic—] The Platonic logic brings us back to serious disquisition—Plato wrote no particular treatise on Logic nor is there any evidence that he considered it as a fit subject for any particular treatise. We are informed that Socrates at least disapproved of books of Logic for here we have the testimony of Cicero, who speaking of Aristotle and Xenocrates, the founders of the peripatetic and academic modes of logic, adds, ita facta est, quod nimine Socrates probabat ars quaedam philosophiæ. By Platonic Logic you must understand therefore that in the different Dialogues of Plato there are contained the principles of a particular Logic and that his Philosophy as far as it is evident to us is eminently logical. I dare not enter on so obscure a controversy as that which respects the Platonic Ideas—this however is certain, that he considered all that individualizes as of the nature of evil and that we become wise and excellent in proportion as our minds become representative of the Class to which we belong. This he expressed, whether figuratively or not I dare not determine, by the assimilation of the individual to that Idea of his Class which pre-existed from all Eternity

in the Universal Mind. As the first means of this assimilation, as the preparatory discipline of novitiates, he attached a high importance to Logic, which is almost always in his writings stiled the Dialectic Art. This Dialectic he considered as consisting of three parts, Division or Abstraction, Definition and Induction. We first divide or abstract from some particular Subject that which it has in common with its class, and again we abstract from that class what it has in common with a higher Genus 'til we arrive at the Supreme Cause whom Plato is fond of calling "The Being." This you may if you like consider as a thoughtful allegory for the common logical process, which includes all classes in the genus generalissimum "Thing." But far be it from me to affirm that Plato's Conception is not the more Philosophical as it is confessedly the more Sublime. Having thus attained the knowledge of all which any given subject has in common with others, we shall immediately perceive all by which it is distinguished from others and this is Definition. Induction was the instrumental form used for the attainment of right Division and Definition and consisted as the word implies in bringing to bear upon one subject a sufficient number of particulars, each distinct in many things from all the others, yet all having some one common point of resemblance. The Logic of Plato consisted therefore in a perpetual investigation of similitudes in things different and in difference in things similar conducted by an Induction of Examples most frequently in the form of questions—for instance, What is the noblest apple? Is it not that which is the best? What the noblest horse? Is it not that which is the best and so on? Then what shall we say of man, what other nobility can you attribute to him but that which subsists in excellence? Have we not found in all things that our idea of nobility is abstracted from that of the best in its kind. In like manner the argumentation might be conducted by an induction of things palpably dissimilar, which however belongs rather to Rhetoric than to Philosophy as the dissimilar is introduced for the purpose of recalling the similar to the mind by the law of contrasts. To this we must add one other mode of argumentation, though it is indeed included in that of Division and Definition and results from the junction of both, I mean, Reasoning by Implication, of which so many instances occur in the writings of Plato. One thing having been affirmed and conceded, you are made to perceive that this thing implies a second, that a third and so on, but this belongs perhaps rather to metaphysics than to Logic inasmuch as it involves the whole question of necessary connection. The Logic of Lord Bacon and of Plato have been considered almost as Philosophical Opposites and Lord

Bacon himself, whose opinions concerning the Ancients must not be read with implicit faith, appears to have considered it in this light; in reality however the Novum Organon of our great countryman and the correspondent parts of his other works are only the Logic of Plato carried on to its proper consequences and applied to Physics.[8] Plato confined himself to subjects the similitudes and differences of which were evident by simple intuition or rather to such as he too often erroneously considered as intuitive. Bacon demanded a previous analysis; his Philosophy was no doubt different from that of Plato according to his own conception of it—he placed the permanent where Plato placed the fluxionary. Practically no doubt he was right, yet I venture to suspect that a still more subtle analysis of the Powers and Objects of Thought will lead to the construction of a third Organon, which will correct the errors of both Philosophers and probably end in deducing the Practice of Bacon from the Metaphysics of Plato. Permit me to repeat however that the Logic of both in the strict sense of the word is the same, both recommending a copious Induction of Particulars and a consequent investigation of their analogies and their points of difference, and an ascending series of Classifications built on this investigation. It must however be confessed that it would be in the highest degree presumptuous to affirm anything positively of the Platonic system as there is too much reason to fear that we do not possess the key to its nomenclature. The works of Plato like the sacred books of the East keep us in continual doubt what is to be understood literally and what figuratively or allegorically. These writers contrive to be dark with excess of light.[9]

THE "SOUND DISCRETION" OF JOSEPH HENRY GREEN.

Of the four works in question, the *Logic*—as will be seen by turning to the passage in the Letters . . . to which the writer refers as "the testimony of Coleridge himself"—is described as *nearly* ready for the press, though as yet *unfinished;* and I apprehend it may be proved by reference to Mr. Stutfield's notes, the gentleman to whom it is there said they were dictated, and who possesses the original copy, that the work was never finished. Of the three parts mentioned

[8] This appears to be the first version of Coleridge's attempted reconciliation of Bacon and Plato. Cf. *The Friend* (1818), III. Essays 8 and 9.

[9] For the uncompleted account of Aristotle's Logic that follows this historical sketch see Appendix A, pp. 150-152.

as the components of the work, the *Criterion* and *Organon* do not to my knowledge exist; and with regard to the other parts of the manuscript, including the *Canon,* I believe that I have exercised a sound discretion in not publishing them in their present form and *unfinished* state.[10]

As far as the "Logic" was involved, this comprises Green's reply, in 1854, to the requests made through the columns of *Notes and Queries* that he give the world the benefit of Coleridge's unpublished manuscripts. Whether at any time he intended to print the two-volume "Logic," is uncertain. He announced in his Hunterian oration, "Mental Dynamics," that he was drawing largely on that work, and in his "Spiritual Philosophy" he quoted from the manuscript, in one instance adding a footnote, "See S.T.C.'s 'Logic,' "[11] which suggests that he then thought the "Logic" would sometime be generally available; but as the *Spiritual Philosophy* was published posthumously from manuscript that was not entirely ready for the press, the evidence it offers is not very conclusive.

The manuscript "Logic" was sold at the disposal of Green's library, in July, 1880, and eventually came into the hands of C. A. Ward of Chingford Hatch, who made persistent attempts to get it published. His letters printed in the *Athenæum* tell how he sent the manuscript to Oxford for the consideration of men there most likely to be interested, and how it came back after several months without comment.[12] One publishing firm showed some interest in it, and Ward tried to raise a subscription to cover the expense of printing, but without success. Mrs. Lucy Gillman Watson, the granddaughter of James Gillman, did her bit to arouse interest in the manuscript, taking Simon to task for announcing in his introduction to the *Spiritual Philosophy* that the "opus magnum" did not exist.[13]

But to this day the manuscript (Egerton 2825, 2826) lies unpublished in the archives of the British Museum. The copy,

[10] *Notes and Queries,* 1st Series, IX, 543-544.

[11] P. 31. On Green's intention of publishing the "Logic" see also *Table Talk,* September 23, 1830, ed. note.

[12] *Athenæum,* July 1, 1893, p. 35; October 26, 1895, p. 571; February 1, 1896, p. 149.

[13] *Ibid.,* November 23, 1895, p. 719. See also Mrs. Watson's references to the "Logic" in *Coleridge at Highgate.*

on paper watermarked variously 1823 and 1827, is in the writing of two different amanuenses or copyists and contains a table of contents and occasional corrections in Green's hand. Penciled on the blank pages are many comments by Ward, and attached to the manuscript is a note of Mrs. Watson's about the handwriting. The treatise very evidently was not finished, as it breaks off before it has fulfilled what at various points it promises. The copy was not revised so as to be in fit shape for the printer; sentences were run together, references to sources missing (one can only hope they were to have been included!), blanks left for Greek words, and neither chapter nor section headings had been revised with any sense of the relations of the parts to each other.

Did Green exercise a "sound discretion" in not publishing the manuscript? It takes only a cursory glance to make one realize what would have happened if he had published it as it now stands. The bulk of the second volume, and parts of the first, would have been condemned as plagiarized from Kant, and (by those who knew him) from Mendelssohn. A sympathetic and careful reader would have discovered enough references to both these writers to make it fairly clear that there was no intention of taking credit for the work of other men, but the references do not appear where one would expect to find them, and Kant's words are used so largely that only the most painstaking reading makes clear the extent to which Coleridge was doing his own thinking, and modifying the doctrines he was expounding. Moreover, unless the manuscript had been very carefully edited the public would rightly have condemned it for its involved and often almost unintelligible style. It must be admitted that Green was right, and that the manuscript as a whole may well remain as manuscript in the British Museum, where it can be referred to by the occasional specialist. The general argument of the treatise, certain interesting and relatively printable passages, and some material that may conceivably throw light on the problem of Coleridge's sources, are as much as students in general are likely to need.

Coleridge's letters, completed works, and manuscript fragments, contain enough references to the "Logic" to make it possible to reconstruct the scheme of the treatise as he prob-

ably meant it to stand.[14] He changed his mind on certain points occasionally, and its title vacillated between the "Organum verè Organum," "The Power and Use of Words," "Elements of Discourse," and plain "Logic." It was to form the introductory section of the great work, theological in its focus, that he termed the "Logosophia." It was to be divided into three main parts, in addition to an introductory historical section and

[14] Cf. Coleridge's general references to his "Opus Maximum," above p. 8, the draft of a letter printed in Appendix B, and the following more specific notes:

(a) *Aids to Reflection,* 1825, p. 174, note (reference to the "Logic" omitted in later editions):

"In the third and last Section of my 'Elements of Discourse;' in which (after having in the two former sections treated of the common or Syllogistic Logic—the science of legitimate *Conclusions;* and the Critical Logic, or the Criteria of Truth and Falsehood in all *Premises*) I have given at full my scheme of Constructive Reasoning, or 'Logic as the Organ of Philosophy,' in the same sense as the Mathematics are the Organ of Science; the Reader will find proofs of the Utility of this Scheme, including the five-fold Division above-stated [Coleridge's "Pentad"] and numerous examples of its application. Nor is it only in Theology that its importance will be felt, but equally, nay in a greater degree, as an instrument of Discovery and universal Method in Physics, Physiology, and Statistics. As this third Section does not pretend to the forensic and comparatively popular character and utility of the parts preceding, one of the Objects of the present Note is to obtain the opinions of judicious friends respecting the expedience of publishing it, in the same form, indeed, and as an Annexment to the 'Elements of Discourse,' yet so as that each may be purchased separately."

(b) *Notes Theological* (1853), p. 60 (Notes on Luther's *Table Talk,* of which the dates run from 1819 to 1826):

"In my Noetic, or Doctrine and Discipline of Ideas = *logice, Organon*—I purpose to select some four, five or more instances of the sad effects of the absence of ideas in the use of words and in the understanding of truths, in the different departments of life; for example, the word *body,* in connection with resurrection-men etc.—and the last instance, will (please God!) be the sad effects on the whole system of Christian divinity. I must remember Asgill's book."

(c) *Ibid.,* p. 236 (Notes on Boerhaave's *New Method of Chemistry,* p. 126):

"Instance for Logic. Here Fumes are taken = Sulphur, without proof. Now *we* know that the Fumes are Sulphur + Oxygen; and B. ought to have seen that the Fumes *might* be Sulphur + x, or an unknown something."

(d) *Ibid.,* p. 237 (On Boerhaave, *op. cit.,* p. 236):

"Excellent examples might be selected for my Practical Logic, *de terminis haud adhuc exhaustis,* or A = B C D taken as A = A."

(e) Unpublished notebooks, sections of the "Opus Maximum."

"For a full insight into the doctrine of Ideas—i.e., of truths, which like the light are their own evidence and the evidence of other things, and for the validity and necessity of this doctrine I must refer in part to the preceding chapters on the Good and the True; but chiefly to the third division of my system of Logic; not wishing to disguise from the reader that if the arguments

a glossary.[15] Of the three parts the first was to be the Canon, or Common Logic; the second the Criterion, for the Detection of Errors in Reasoning; the third, the Organon, an Instrument for the Positive Discovery of Truth. The first section was to deal with the forms of reasoning, and was not by itself expected to serve as an instrument of real knowledge.[16] The Criterion was probably intended to deal with formal logic also, as it was to contain many typical instances of fallacious reasoning, but as soon as Coleridge began writing it he found himself explaining the distinction between the reason and the understanding, since he considered the application of the latter faculty to inappropriate material the primary source of error in reasoning;[17] thus before he realized it he was involved in the critical or transcendental logic. The Organon he often spoke of as the "Noetic." In it he evidently intended to develop the philosophy of the Pentad, which he considered the especial contribution of his system. It appears in his writings many times, in many different applications.

Prothesis
Thesis Indifference Antithesis
Synthesis

It is intimately related to the Divine Tetractys of Pythagoras, as he understood it, and to various systems based on Trichotomy as opposed to Dichotomy—notably the reconciliation

and facts there collected have failed in convincing him either of the reality of ideas as contradistinguished from notions and perceptions, in short as differenced from both the abstract and the sensuous, nor of the necessity of assuming them, the reality of a responsible Will having been assumed or conceded on the ground of consistency, he will find nothing coercive in the train of reasoning which is now to follow." (MS B 2.)

(f) *Ibid.* (Note to a passage in which he might be accused of taking liberties in coining or adapting terms):

"Those readers, who think an excuse for this liberty requisite, I refer to my remarks on this subject in my Treatise on Logic which was in fact written as the Prolegomena of the present work." (MS B 2.)

(g) *Ibid.:*

"For a list of these equivocal terms connected with ethics and intellectual analysis, I refer to the logical prolegomena and glossary, which is intended as an introduction to this work." (MS B 2.)

[15] On Coleridge's interest in philosophic glossaries cf. *Statesman's Manual,* First Lay Sermon, Appendix, p. xlvi.

[16] On the negative character of formal logic, see *The Friend* (1818), Vol. II, Essay 7, p. 148.

[17] Cf. *Aids to Reflection,* p. ix.

Windsor, Farquharson, Repulse, Kent, Charles Grant, Kellie Castle, Marquis Camden, Bridgewater, and Waterloo.

The *Lowther Castle* had been spoken with in the China sea, and was hourly expected.

According to an official statement, the number of proprietors of the Navy Five per Cents., on the 1st of January of the present year, was two hundred thousand.

Mr. GEORGE LAMB has been chosen representative in Parliament for Dungarvan.—*Morning Paper.*

Mr. COLERIDGE proposes to devote a determinate portion of each week to a small and select number of gentlemen, not younger than 19 or 20, for the purpose of assisting them in the formation of their minds, and the regulation of their studies. The plan, which is divided between direct instruction and conversation, the place, and other particulars, may be learnt by personal application to Mr. COLERIDGE, at Highgate.

Died, yesterday, at his house, in Stratton-street, THOMAS COUTTS, Esq. Mr. COUTTS had attained the advanced age of 87. His life was one of great and useful exertion: he possessed a singularly clear judgment, with a warm and affectionate heart. Few men ever enjoyed, in the degree which Mr. COUTTS did, the confidence and esteem of his friends, or obtained, unaided by rank or political power, so much con-

COLERIDGE'S ANNOUNCEMENT OF HIS PHILOSOPHIC CLASS

FROM THE LONDON *Courier*, FEB. 25, 1822

of antitheses that features so largely in German philosophy from Kant to Hegel.[18] This section would doubtless have developed in detail Coleridge's theory of the Idea as expressible only through contradictory propositions of the understanding that force one to adopt a higher, reconciling point of view.[19] It would also have shown the importance of the Idea and its place as existing prior to conceptions and as determining the premises which in the logical acts of the understanding are taken for granted. It is not strange that Coleridge never worked it out adequately for purposes of a treatise on logic, for when he got into the realm of Ideas, where thought and reality were one, he found himself necessarily talking in theological terms of creation and the manifestation of the absolute "I Am" through the Divine Logos.

There seems to be little question that the manuscript was in part at least dictated to members of the philosophical "class" that Coleridge conducted during the winter of 1822-23. Campbell has told about as much as is known of this educational venture.[20] Early in 1822 Coleridge, who had already been dictating to Green once a week for several years, and was at the time dictating to "a Mr. Stutfield with a Mr. Watson" Thursdays, decided that he might as well dictate simultaneously to a number of amanuenses, and sent to the *Courier* an announcement of his plan to organize an informal class.[21] "Either then or soon after," Campbell writes, "some such classes were formed, but I doubt if any numbered so many as five or six pupils or lasted two years [as Coleridge had planned]." The details of the scheme are given in a letter to Stuart:[22] His intention was to educate, by means of dictations and informal conversations, a group of young men who might be preparing themselves for the pulpit, the bar, the senate, or "any of those walks in life, in which the possession and display of intellect are of especial importance" (the same aim, in general, that he expressed in 1796 when he planned to form a private class on

[18] Cf., for instances, *Aids to Reflection,* footnote, pp. 171-174; *English Divines,* I, 96-97, II, 179; *Confessions,* p. xlvi; *Table Talk,* April 24, 1832; *The Friend* (1818), Vol. I, Essay 13; *Biographia* (1847), I, Appendix, p. 321, *Notes Theological,* p. 170, and *Works, passim.*

[19] Cf. *Aids to Reflection,* footnote, pp. 225-228; *English Divines,* I, 264.

[20] Campbell, *op. cit.,* pp. 250-251.

[21] See facsimile.

[22] *Lake Poets,* pp. 281-286.

his return from Germany).[23] Though the manuscript "Logic" as it now exists gives evidence of being a second copy, rather than an original taken down directly from dictation, it is just such a work as might have been dictated under the conditions proposed. In certain sections of the manuscript Coleridge deliberately addressed his readers as though they were present, and it is clear that he had in mind a group of students preparing themselves for such professions as were mentioned in his letter. Incidentally, there is definite evidence that Kant's *Logic,* on which, together with the *Prolegomena* and the *Critique of Pure Reason,* much of the argument of the manuscript is based, was actually in Coleridge's hands when he was dictating to Watson and Stutfield, the friends to whom, as he wrote Allsop, December 26, 1822, he had nearly finished dictating the "Logic" in its three parts.[24]

The introductory sentences of the first "Monologue" that appeared in *Fraser's Magazine* in 1835 show that a class in logic really did materialize. The editor wrote:

> It was our fortune to accompany a party of gentlemen to a private course on Logic, which he [Coleridge] had undertaken to give them in common at set times; a task of tuition on which the benevolent poet set no pecuniary price but which no honorable mind could suffer the performance of without rendering grateful recompense. The occasion to which we are now referring bears the date about the year 1823; and it was Mr. Coleridge's wont then to dictate deliberately to his pupils, whether from memory or immediate impulse, his sublime lessons, permitting them to take his words down in writing.[25]

The second monologue published[26] purports to be, not a somewhat popular digression like the first, "On Life," but one of the lectures on the difficult subject of logic itself. "It is, as

[23] See above, pp. 40-41.

[24] On the inside of the back cover of the copy of the *Logik* containing Coleridge's autograph annotations, stand the words: "After I have ceased dictating, I would be left with Watson and St." H. Nidecker (*Revue de Littérature comparée,* January-March, 1927) calls attention to this evidence, though he mistakenly assumes the "Watson" referred to was Seth Watson. (On this point see my note, *Times* Literary Supplement, August 25, 1927.)

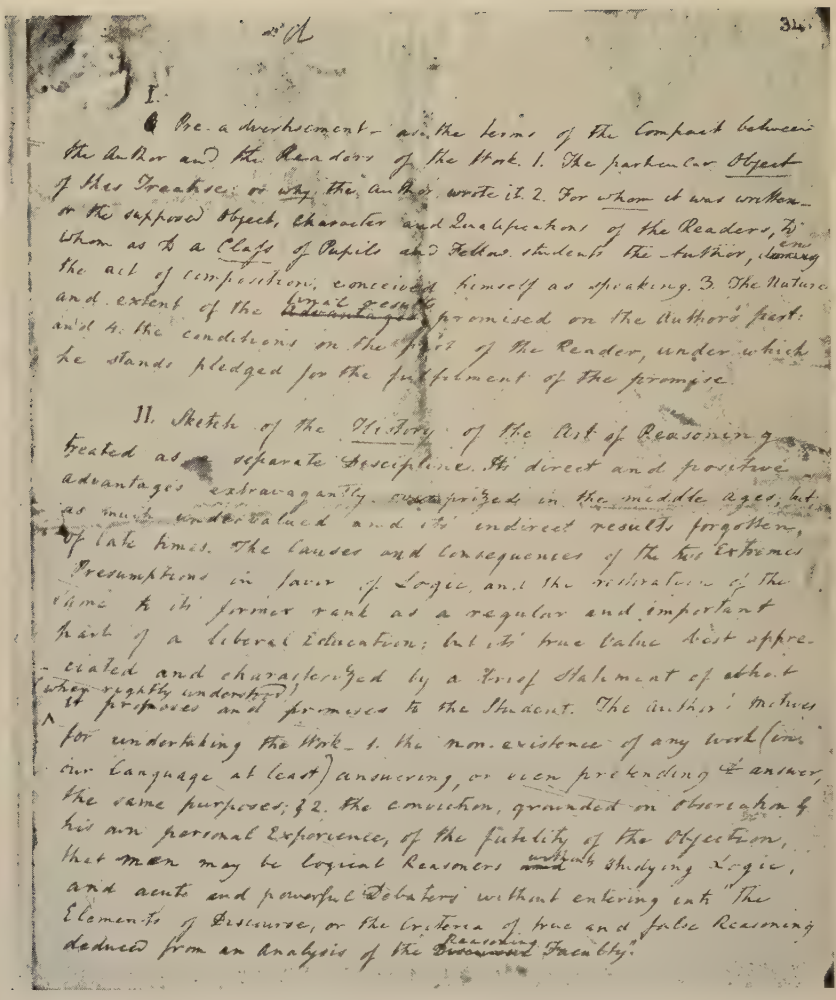
[25] XII (November, 1835), 493. In this same article the course is described as an attempt to help students "in the study or acquisition of the transcendental Science." If this statement of purpose is correct it may well account for the detailed exposition of Kant's system to be found in the "Logic."

[26] XII (December, 1835), 619-629.

the reader will perceive, given in the form of an Introduction to a Volume on Logic. It was, in fact, Mr. Coleridge's design to put his pupils in possession of such a volume, though in manuscript, and taken down from his own lips." The lecture as it stands here does not form part of the two-volume manuscript, and is in fact much more finished than any chapters of the manuscript. It takes up logic as an art and as a system, emphasizing as the aim of the work the securing of appropriateness and significance in words, then gives a short history of logic from the middle ages to the present time, and concludes with a passage that may well be quoted in full, as it so evidently serves to introduce the treatise of which the two volumes of manuscript form a part:

Thus commenced our sketch with a state in which logic was all, and we end with a state in which logic is only not nothing: in both instances meaning, by logic, a formal science, a distinct and separate discipline of the understanding. Is this a true assertion? I appeal to the almost entire abandonment of the science at one university, and (till of late, at least) its virtual nothingness at the other; to the contempt into which the very name has fallen with the majority of the so-called reading public; and to the full assent, that even the more highly educated portion have given to the dictum of Locke, itself grounded on a misconception or misapplication of a passage in Lord Bacon, that the mathematics are a complete substitute for logical exercises, and that the *Elements* of Euclid may advantageously supersede the *Organum* of Aristotle and the *Compendiæ* of Wolff and Baumgarten. But if my assertion be tenable—if logic, as a distinct formal science, has ceased to make an effective part of a liberal education, another question presents itself: Is this an evil? In offering the following work as the remedy, I have sufficiently declared my own conviction in the affirmative; and to the work itself, but still more to the state in which the reader finds his own mind during and after its perusal, I must refer for the proof. I know of no better way of explaining myself intelligibly on this point, than by the avowal that, as far as the reader is concerned, I regard that alone as genuine *knowledge* which, sooner or later, will reappear as *power*. Improvement of faculty is the true criterion, the only sure evidence of increased attainment. In addition to this, however, and to the various materials for reflection contained in the work, the philological, psychological, and historical information interwoven with the direct instruction, I have made it my especial aim in the second and third

divisions, and still more at large in the logical exercises which will accompany or follow this volume, so to choose the greater number of my illustrations and examples from modern works, the productions of the last fifty years, and those of highest name and authority, as to put the student in possession of abundant proofs (such, at least, as I deem proofs), both of the reality and the consequences of the general neglect of the science of logic; or the grounds and rules of appropriateness and significancy in the choice, connexion, and arrangement of words, for the purposes of distinct and conclusive reasoning.



I.

Pre. a declaration of the terms of the Compact between the Author and the Readers of the Work. 1. The particular Object of this Treatise, or why the Author wrote it. 2. For whom it was written or the supposed Object, character and Qualifications of the Readers, for whom as to a Class of Pupils and Fellow students the Author, assuming the act of composition, conceived himself as speaking. 3. The Nature and extent of the final Results promised on the Author's part: and 4. the conditions on the part of the Reader, under which he stands pledged for the fulfilment of the promise.

II. Sketch of the History of the Art of Reasoning treated as a separate Discipline. Its direct and positive advantages extravagantly overprized in the middle ages, but as much undervalued and its indirect results forgotten, of late times. The causes and consequences of the two Extremes Presumptions in favor of Logic, and the restoration of the Same to its former rank as a regular and important part of a liberal Education; but its true value best appreciated and characterized by a brief Statement of what it proposes and promises to the Student. The Author's Motives for undertaking the Work. 1. the non-existence of any work (even in our Language at least) answering, or even pretending to answer, the same purposes; 2. the conviction, grounded on observation & his own personal Experience, of the falsity of the Objection, that men may be logical Reasoners without studying Logic, and acute and powerful Debaters without entering into "The Elements of Discourse, or the Criteria of true and false Reasoning deduced from an Analysis of the Reasoning Faculty."

A SECTION OF THE AUTOGRAPH OUTLINE OF A "HISTORY OF THE ART OF REASONING"

FROM THE BRITISH MUSEUM MS EGERTON 2801

THE LOGICIAN

CONTINUED

ARGUMENT OF THE "LOGIC"

Outline of an Art of Reasoning

(Autograph manuscript in the British Museum, Egerton 2801, pp. 34-36, watermark, 1822)

I. Pre-advertisement—as the terms of the Compact between the Author and the Readers of the Work. 1. The particular *Object* of this Treatise: or *why* the author wrote it. 2. For *whom* it was written—or the supposed Object, Character and Qualifications of the Readers, to whom as to a Class of Pupils and Fellow-students the Author, in the act of composition, conceived himself as speaking. 3. The Nature and extent of the final results promised on the Author's part: and 4. the conditions on the part of the Reader, under which he stands pledged for the fulfilment of the promise.

II. Sketch of the *History* of the Art of Reasoning treated as a separate Discipline. It's direct and positive advantages extravagantly overprized in the middle ages; but as much undervalued and it's indirect results forgotten, of late times. The Causes and Consequences of the two Extremes. Presumptions in favor of Logic, and the restoration of the same to it's former rank as a regular and important part of a liberal Education; but it's true value best appreciated and characterized by a brief Statement of what (when rightly understood) it proposes and promises to the Student. The Author's motives for undertaking the work—1. the non-existence of any work (in our language at least) answering, or even pretending to answer, the same purposes; and 2. the conviction, grounded on observation and his own personal Experience, of the futility of the Objection, that men may be logical Reasoners without studying Logic, and acute and powerful Debaters without entering into "the Elements of Discourse, or the Criteria of true and false Reasoning deduced from an analysis of the Reasoning Faculty."

III. On Education. The origin, proper import, and limits of the Term. Artificial Education prepared and suggested by the Education of Nature. The plan of Education adopted by our Forefathers vindicated against modern Objections and Improvements, it's several Periods or Epochs enumerated and described; and not only it's superior but it's *exclusive* claims to the name demonstrated. The deci-

sive superiority of our great Schools, in which the essential parts of the old plan are still more or less faithfully retained. The defects of the Education there received: and that they are attributable to a departure from the *spirit,* and the too general omission of one important Division and Constituent Part, of the old Scheme. Improvements and Furtherances in the Art and method of educing and training the mind in accordance with the philosophy or true idea of Education; of which the higher Branches of pure Mathematics on the one hand, and the three Divisions of Logic on the other, form the completion and conclusion.

IV. The etymological history of the Words (Logos) from which the Science, that treats of Words in relation to connected Thoughts, derives it's *technical* Name—and the several successive meanings of the word from the visual image, it's simplest and primary Signification, to its last and highest sense in the Christian Theology. The sense of the term as expressing the Ground or faculty by which men are enabled to connect words conclusively, that, namely, which our great Dramatist with a happy fullness yet precision names Discourse of Reason (The *Discursus; Vis discursoria; Cognitio discursiva;* of the Schools) and to which sense the Author confines himself in the two first Divisions of his Work, determined and explained. The term, *Reasoning,* by which we *english* the Greek Logismos, apt if not previously explained to suggest a false notion. The Logos, when the *human* mind is the subject, answers to the Understanding, this word being used to express the Faculty of *reflecting* and *judging* exclusively.—The high importance of Words, and the incalculable moral and practical advantages attached to the habit of using them definitely and appropriately, the ill consequence of the contrary not confined to Individuals, but extending even to national Character and Conduct. The term in question (i.e. the Understanding) an instance of this: and the contradistinction of this Faculty from the Sense on the one hand and from the Reason (mens *absoluta,* lumen *siccum*) on the other, stands foremost among the eminent services rendered to Philosophy by Lord Bacon. It is indeed the main object of his Novum Organon, and the central Idea of his System. To the unsteadiness in the application of Words; especially the use of "the Reason" and "the Understanding" indifferently for one and the same Faculty, and this too the faculty, the imperfections and narrow limits of which he himself displays with a depth of insight and a clearness of demonstration hitherto unrivalled; and the consequent adoption of mystical phrases, as Lumen Siccum, Visio lucifera, and the like, in order to distinguish the Reason from the Understanding;—to these, aided by some actual and more apparent inconsistencies scat-

tered thro' his numerous Treatises and Outlines, far more than to the aphoristic form of his great Work, ought we to attribute the undeniable fact, that this pre-eminent Philosopher is more talked of than read and more read than understood, or read to any worthier purpose than that of finding quotations and mottos for ornament or authority.

I have enlarged on this point far beyond the bounds of a mere Chapter of Contents, because the hope and persuasion, that the Work to which and to the preparation I have devoted so many years of meditation and Research, will, where ever the *desire* exists, supply the *means,* of deriving the full profit from the study of Lord Bacon's Writings, that mine of enkindling Truths and pregnant expressions! this hope, I repeat, came in aid of the Main Object, that I had proposed to myself, and formed my strongest *supplementary* Motive. What the main Object is, and that which I have kept steadily in view from the title-page to the concluding period, I will explain as briefly as I can, consistently with my purpose—for from this the Reader of the present Outline, if only he assumes for the moment that the execution correspond to the Plan, will form a clear conception of the character of the entire work. Let me only premise, that in what follows I am speaking of educated men, and that tho' the Remarks more particularly apply to Individuals in public or professional life, they concern all men, whose words are of any importance to themselves or to other men. "In all Discourse and Intercourse of Mankind (says Jeremy Taylor) by *Words* we must agree concerning each others' Meaning:" and how is this possible unless we first determine, each of us what he himself means by them? And how, again, is this to [be] expected where the Individual has never been taught or accustomed to put the question at all? Or, worse still, (tho' one of the most common and approved Recipes for Self-delusion in modern times!) to find out the *explanation* in an English Dictionary, i.e. one or more other words—a scheme of conveying the *meaning* of each term, that might perhaps have answered at the Tower of Babel during the interval between the confusion of Tongues and the Dispersion of the Speakers; but which in any cultivated Language can answer no other end but that of passing off dim, vague or confused

[The MS breaks off here in the middle of a line.]

The First Volume of the "Logic"

(British Museum MS, Egerton 2825)

The first volume of the manuscript consists of two introductory chapters containing much of the material outlined in Sections III and IV of the preceding synopsis.

In the first chapter (pp. 1-37) Coleridge devotes some time to showing the importance of logic. He argues the point on grounds of the need for clear-cut distinctions in thought and exactness in words, that is, on grounds of its scientific value.[1] Compared with this scientific value (and here he includes the use of words "as the exponents of all our thoughts and notices," not simply "science proper,") the employment of logic for purposes of rhetoric and forensic debate is but "accessory and of equivocal worth." He grants that the "approximate" use of words for which he is pleading demands a study of things as well as of logic, but defines logic as the rules which facilitate the attainment of the requisite power and also make evident its necessity.[2]

He then considers the place of logic in education. His discussion is involved. It includes an etymological study of the word *educate,* leading to the conclusion that artificial education consists in *educing*[3] and *training* on the basis of the education afforded by nature;[4] some historical generalizations on linguistics; and hints for a philosophy of grammar that should derive all the parts of speech (grammatically, not historically speaking) from the verb substantive.[5] The argument as a whole is a setting forth of the value of language as the natural and ideal subject matter by which man continues the education of nature, rendering the child "a *social* being; capable of communication, and consequently of understanding and being understood." The case for the linguistic arts rests largely upon two facts: first, that the use of language adequately exercises various faculties of the mind, especially that of abstraction, by which man is distinguished in kind from the animals; second,

[1] On Aristotle's interest in logic as an instrument of science see below, p. 104.
[2] For Coleridge's comments on the Logic of Isaac Watts and that of Condillac see below, pp. 104-105.
[3] Cf. *The Friend* (1809-10), No. 21, p. 341, note; III (1818), 291 note.
[4] See below, p. 105. [5] Cf. *Notes Theological,* pp. 401 ff.

that the study of language offers the ideal means of reflection upon the faculties and operations of the mind. Such reflection is essential to the conscious use and adequate development of the intellectual faculties. There follows a table of the "Formal Sciences or Systematized Arts of which words are the subject and the medium," arranged in natural sequence. First comes Formal Grammar,[6] "which reflects the forms of the human Mind, and gradually familiarizes the half-conscious boy with the frame and constitution of his own Intellect"; then Rhematic, or the "doctrine of arranging words and sentences perspicuously"; then Rhetoric, "the art of declaiming persuasively"; and finally Logic "as the art and science of discoursing conclusively."[7]

The second chapter (pp. 38-88, entitled again "Chapter I") contains a long and intricate attempt to define logic by considering the derivation and history of the word, dwelling on the difference between λόγοι or deliberate, carefully selected words, and ῥέματα, or the words of casual conversation. Explaining the application of the term λόγοι to fables[8] and to histories, he goes on, with an interesting parenthesis on poetry and history,[9] to the application of derivatives of λόγος to men of superior knowledge and understanding, and then discusses the distinction between the Logos and the Nous, Learning and Wisdom,[10] the Understanding and the Reason.

At this point he gives an anticipatory outline of his metaphysical system, though he does not yet ask for its acceptance. Metaphysics, according to this system, consists of Noetic, pertaining to the reason, Logic, pertaining to the understanding, and Mathematics, pertaining to the senses.[11] In order to define logic still further he asks whether it is a real or a formal science; his answer involves him in an abstract discussion of the subjective and the objective, worded in part in the terms of

[6] Cf. *Table Talk*, September 23, 1830. On the study of grammar see below, pp. 105-106.

[7] A parenthetical discussion of the rules and laws exemplified in nature (I, 22-23) proves to be a free translation of a passage in Kant's *Logik* (1800), Einleitung, S. 1.

[8] See below, p. 106.

[9] See below, p. 106.

[10] See below, p. 107.

[11] "An autograph draft of this table appears in the British Museum MS Egerton 2801, p. 85.

Schelling that are used in Chapter XII of the *Biographia*.[12] "The Logician," he concludes, "as far as he is treating of the forms of Logic, abstracts his attention from the outward world, without denying either its reality, or the reality of its connection with the mind."

Coleridge next gives a brief *résumé* of points made, in order to aid the student in answering the first of two questions which he should ask himself at each stage of his progress:

> Have I learnt, that is, made myself master of, that which has been taught, whether by written or oral instruction, and what are the main particulars?
>
> Have I reason to believe that my faculties are improved and my means enlarged? for that alone is truly knowledge, in relation to the individual inquirer, which reappears as power,[13] and the improvement of the faculties, the only sure measure and criterion of the attainments.

In bringing the chapter to a close he defends the use of technical and generic terms,[14] and urges the student not to be discouraged by them. In the case of chemistry and philosophy alike, he says, generic terms are employed

> as marks for recollection or marks of security—means by which we bring a train of equivalent or similar particulars, into one group before the memory, or by which we refer to a past ascertainment with a conviction that we have ascertained the same, and have it in our power to renew our distinct insight into the grounds and process whenever we please.

The first volume ends here.

The Second Volume of the "Logic"

(British Museum Manuscript, Egerton 2826)

In a few introductory remarks (pp. 3-5) Coleridge defines his field, carefully distinguishing between logic proper, or logic

[12] Cf. Sarah Coleridge's notes to this chapter in the 1847 edition. In the "Logic" Coleridge takes over a number of Schelling's clauses almost *verbatim*, but varies his argument by amplifications and illustrations more than in the *Biographia*.

[13] Cf. *Lake Poets*, p. 283.

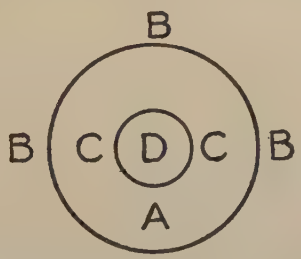
[14] On Coleridge's recognition of the need for technical terms see *Anima Poetæ*, p. 232, and *Works*, *passim*.

perfectly abstracted from objects, and logic in the looser sense as imperfectly abstracted. The former, a "canon or form to which all legitimate constructions of the understanding must correspond," was never meant as a "primary and direct instrument of discovering truth," nor can it serve unaided, as "the means of distinguishing the truth from falsehood otherwise than formally." By itself it is a "hollow science," a thousand syllogisms amounting merely to "nine hundred and ninety-nine superfluous illustrations of what a syllogism is."[15] But logic in its wider sense, the sense in which he intends to use the term,[16] includes much more than the formal canon; it includes the criterion or dialectic and the organon as well.

He is now ready to begin the work proper, with the Pure Logic or Canon.

THE CANON

The first chapter of the Canon (pp. 5-18) contains an attempt to explain syllogistic reasoning in terms of ordinary observation and judgment; to show the actual genesis in consciousness of the major and minor premises and the process by which the conclusion is reached.[17] This is followed by a somewhat more conventional analysis of the typical syllogism, aided by a diagram.



A is the Major subject comprehending the whole space within the circumference B, which represents the predicate of the Major subject. The space D represents the Minor subject and it is asserted that the space which is secluded by B includes the space D, which is included by C, and that therefore A and D are concluded by B.

[15] Cf. Coleridge's disparagement of syllogistic logic in *Table Talk*, September 23, 1830.

[16] As a matter of fact, Coleridge is not consistent in his use of the term.

[17] See below, pp. 108-110.

This is commonly called the First Figure, but, he says (following Kant's *Logic* on the convertibility of the figures), the other figures are logically valid "only as far as it can be shewn that they imply the same mental process." "To seclude, to include, and thus to conclude constitutes syllogism,"[18] he states in summing up the explanation.

Here again he emphasizes the fact that the formal processes of logic taken by themselves contribute nothing to our real knowledge. The essential thing is the determination of the premises.

> It must be evident that . . . the whole force of the intellect must be exerted on the primary act, on the justification of the terms by which we seclude and of the fact implied in the predicate by which we include. Both of these, however, imply knowledges that are more than logical, that are real and not merely formal.

Coleridge ends the chapter with an illustration taken, without acknowledgment, from Mendelssohn's *Morgenstunden,*[19] of the logical relations of superior and subordinate conceptions.

The remainder of the Canon consists of one long chapter entitled "The Logical Acts" (pp. 18-116). This chapter begins with a discussion of the logical acts of comparison, abstraction, and substantiation, in which Coleridge follows Kant's *Logic,* adding, however, an introductory section on the act of attention. He distinguishes between generalizations, abstractions, and ideas, criticizing Kant's position on the matter. The Idea is equally opposed both to the generalization and the abstraction, for it must be conceived "as anterior to all images and as that which is presupposed in all form, and in every concrete as far as the same is reducible to any determinate Law."

Repeating, in slightly different terms, his earlier survey of syllogistic reasoning, he gives a caution against thinking too meanly of the purely formal process. The combination of the two logical subjects, though a necessary mechanical act, is an act that has both truth and reality. It is necessary to give no reason for the truth and reality of this conclusive act, for "it is itself reason and as such having its evidence in itself and immediate."

[18] Cf. *Table Talk,* September 23, 1830.

[19] "Logic," pp. 15-17. Cf. Moses Mendelssohn's *Morgenstunden* (1790), SS. 7-9.

Here is Coleridge's opportunity to introduce the distinction between the reason and the understanding, and he defines them, the one as the faculty of principles, the other as the faculty of rules. The difference he illustrates interestingly from the history of criticism.[20]

The following sections of the chapter deal with conceptions; "complex ideas" (a term Coleridge objects to on the ground that what are referred to are neither complex nor ideas); synthetic unity and the intuitive imagination (illustrated by an incident taken from Kirby and Spence's *Entomology,*[21] judgment, or the German *Urtheil,* as the resolution of any given representation into the object and subject and the co-existence of both as one); and identity and contradiction, with a parenthesis on negation.[22] The discussion of judgment leads him into an involved metaphysical consideration of the principle of the certainty of our knowledge, and in this he gives much of the substance of the first six theses of Chapter XII of the *Biographia.*

He undertakes a statement of the three assumptions "on which the solidity of Logic as the Science of conclusion is grounded"; but after dealing with the first two, the existence of Mind absolutely, or Nous, and the identity of the Nous and the Reason that is present in the mind of man, he digresses into a discussion of various kinds of unity, and never gives the third assumption.

Referring to the definition of judgment given before, Coleridge amplifies it somewhat, and links it up with the processes of common logic, saying that the functions of logic begin when one considers a subject objectively, and judgment is the determination of a subject by a predicate, which amounts to the same thing. He objects to defining judgment as an act of comparison—comparing a mark with a thing.

There is little perhaps to object to what is here meant yet somewhat to the way of expressing this meaning. And I am anxious to impress this because more than any other point it is calculated to

[20] See below, p. 110.

[21] For the illustration from Kirby and Spence, in which Coleridge rather characteristically shows some confusion as to what is his own experience and what is that of the scientists he cites, see below, pp. 111-112.

[22] See below, p. 112.

elucidate what has been before declared respecting the simplicity and universality of the syllogistic form as uniformly consisting of the three acts of the Mind, Clusion, Inclusion, and Conclusion.

From this point we are now able to see the true use and application of Logic; and this twofold. In the first the forms of thinking are realized in the objects of the thought, as that all men are mortal and therefore Socrates, being a man, must be mortal. Here is an actual inclusion, and in all cases of this kind the process as far as it is a logical process is almost automatic or spontaneous, and the only question is respecting the truth of the original perceptions or apprehensions, whether Ideas or facts, and not respecting the conceptions or comprehensions which follow by the very mechanism of our intellect. It is a Science of Nature's rather than of our conscious self, or as we commonly say it is a Natural Logic.

But there is another application which though it may be called verbal is of far greater need and more frequent utility. Nor will the epithet verbal degrade it in our minds who have learnt to distinguish words, λόγοι, from articulate sounds, ῥήματα,[23] and to consider them as partaking of this communicative intelligence, τοῦ λόγου, and of its ideas or communicable forms, τῶν λόγων.

The first utility is illustrated by a case in which "if we regarded the mark or predicate in the minor as the predicate of the subject it would be a mere synonym of the predicate in the major instead of being included therein"—God is simple; God is non-composite. "And yet it may be of use both as an auxiliar, and as a corrective, to remind a learner that God being simple cannot be sought after by the same organs as bodies, or things that are compound." The addition is not to "the material truth," but to the "mind's property" in truth.

Touching once again on the subject of the reason, he states that the judgment as a faculty may be technically distinguished from the understanding as the "power of *determining* this or that under the condition of some rule," and that the reason is "what gives a necessity or universality to that determination." Predicates are "intermediate marks," and "every judgment by means of an intermediate mark is a conclusion." The phrase "immediate conclusion" he objects to. He doubts whether immediate mental processes can rightfully be called logical; certainly they are not conclusions, though they may be Truths of Reason, of which he will speak in the "Organon."

[23] Cf. *Aids to Reflection*, p. 25, note.

The chapter—and the Canon as well—ends with a statement of the rules for the various syllogistic figures, repeating that the first is the only pure and legitimate formula. In these rules Coleridge follows Kant closely, and such amplifications as he indulges in add nothing of importance.

THE CRITERION

The old and famous question with which it was once usual to puzzle the logicians and to force them either to a confession of their ignorance or to the necessity of answering in a circle is that which Pilate of old contemptuously [put] to him who was in the highest sense the reality of that concerning which he asked: What is Truth. The verbal definition, viz. the coincidence of the knowledge with its object, is here presupposed and admitted. But the querist wants to be informed, and such is the purport of the question, what is the universal and sure criterion of any and every knowledge.

Prudens quæstio dimidium scientiæ, says Lord Bacon. It is already a great and important proof of Understanding and insight to know what can be rationally asked.[24]

In this way Coleridge begins the second division of his Logic, the Criterion or Dialectic (pp. 116-172). To show that certain questions cannot be rationally asked, and demand no answer other than the demonstration of their irrationality, he gives a long discussion of the nature of questions. This he takes in substance (much of it *verbatim*) from Moses Mendelssohn's *Morgenstunden*,[25] following Mendelssohn in his citations from Harris' *Hermes* and in his comments thereon. With Mendelssohn he reaches the conclusion

that all questions must be answerable, that they must consist of imperfect or defective positions which a possible answer may convert into perfect, verständliche and conceivable positions; as soon as it is proved that the position which the question intends to have completed is in its own nature incapable of completion the question itself must be rejected, and [Coleridge himself adds] instead of an answer, the questioner, if he be in earnest and deserve a serious reply, must have this incurable defect in the question pointed out and explained to him.

[24] Cf. above, p. 61, and note.

[25] For a detailed study of the relation of Coleridge's argument to Mendelssohn's, see my article in *Studies in English and Germanic Philology*, October, 1929.

He applies this principle to several frequently discussed problems, beginning with the question, What is Truth? This question may have several meanings, but when asked in the sense suggested above, as a request for a universal criterion of the correspondence of knowledge with its object, it is irrational. He uses the method of *reductio ad absurdum.*

If you ask for the meaning of the word and this relatively to the human mind I reply, the coincidence of the word with the thought and the thought with the thing. Relatively to God the question has either no meaning or admits of but one reply, viz. God himself—God is the Truth, the identity of thing and thought, of knowing and of being, and consequently the Idea of God is presupposed in the coincidence of the one with the other, which implies the existence of each severally; but this was not the purpose of the question—you ask for some one test by which in all cases you can determine this coincidence between the word, the thought and the thing, and in this sense the question implies a contradiction. For to be universal we must first abstract from all that is particular in each thought: but this consists in its reference to the particular thing at that time thought of; consequently we remove the very subject for which the criterion was required, and properly worded the question should stand thus, what is the universal criterion of truth when all truth is out of the question.

Truth, therefore, is its own criterion and in the language of Augustine at once discovers itself and detects its opposite, even as we discover darkness by light but the light by its own evidence.

So far on the supposition that the question respects Truth objectively: but there is another sense and a more fruitful one. We may mean subjective Truth, in which Truth may be defined, the coincidence between the thought and the thinker, the forms, I mean, of the intellect. Now as far as concerns the knowledge of the mere *form* abstractedly from the *matter,* it is plain that Logic in as much as it presents the universal and necessary rules of the Understanding, must in these rules present likewise the criterion of truth, that is, of formal truth, or truth relative to the constitution or constituent forms, laws and rules of the thinking faculty. For what contradicts these tests is false, because the Understanding contradicts its own universal rules of thinking, and therein contradicts itself. And in Truth there can be no contradiction. These criteria however respecting only the form of Truth are in themselves infallible; but not of themselves sufficing; for, though a knowledge may be in perfect congruity with the logical form, and be free from all contradiction, it may nevertheless contra-

dict or be incongruous with the matter or real subject. The logical criterion of truth or the harmony of an affirmation with the laws of the reason and the rules of the Understanding is the conditio sine qua non but still only the negative condition of all truths, and farther than this pure and proper logic cannot extend, and consequently can supply no touchstone of error or falsehood, when such error lies in the thing, fact, or reality considered as the substance and matter of the thought.[26]

After an interesting digression on truth in relation to the hearer,[27] or truth for purposes of communication, he goes on to consider several instances of unanswerable questions, following Mendelssohn often, but showing definitely wherein he differs from him. These questions, dealing with ultimate reality, as distinct from appearances—things in themselves as distinct from what they do or suffer—he shows to be irrational *from the standpoint of logic*. And here he differs from the position of Mendelssohn and others who tend to dismiss such questions altogether as merely verbal. He defends the so-called verbal disputes of the scholastics[28] and asks that the critics consider what they mean by "words" anyway.[29]

The division ends with a re-statement of the necessary limitations of the understanding, and hence of logic. The realities which constitute the first and last of Philosophy

> are not objects of Logic and therefore cannot be submitted to a discussion or reasoning purely logical. . . . The first source therefore of falsehood in Logic is the abuse and misapplication of Logic itself. But if not of the Understanding of what other power are these truths the besetting object?

The answer to the question will form the third division of his work.[30]

THE THIRD SECTION

The next page (174) is headed "Chapter," "On the Discussion of the Premises in all Logical Reasoning," and above this

[26] Cf. the *Critique of Pure Reason*.

[27] On the criteria of truth relative to communication see below, p. 113.

[28] See below, p. 114.

[29] See below, pp. 114-115.

[30] It seems probable that Coleridge meant here to introduce the "Organum" or "Noetic," but (as the subsequent argument shows) he discovered that his discussion of the premises, which constitutes the next sections, was in reality another "Criterion," written from the standpoint of the transcendental analysis.

caption stand the words, "the contents and subject of the third and last"—evidently a continuation of the sentence with which the preceding section closed. This discussion involves, Coleridge says, consideration of the two sources of the primary reality which is assumed in all premises—the reality antecedent in a sense to the subject and predicate, that expressed by the copula "is." The two sources are the Reason and the Sense.

Concerning the Reason we have in the preceding chapter spoken sufficiently for the purpose which we had in view, which was to satisfy the claims of morality; and secondly to prevent, tho' at the price of anticipation, any misunderstanding (which by the way is as often occasioned by the absence of an important truth as by the presence of an error or falsehood)—We have therefore now to treat of the latter source, viz. the senses.

Here Coleridge finds it necessary to cut a knot which is to be untied later. For when we speak of impressions on or through the senses, the question arises, what is it that is impressed? Since the forms of the objects have been assigned to the activity of the mind, what is left?

Shall we answer, a sensation, which tho' of necessity inherent in the sentient subject itself, the subject cannot refer to any act or volition of its own, and which being accompanied with the sense of contingency, and its succession being altogether irreducible to the spontaneous processes of the mind carried on under the law of association, seems to authorize, but at all events compels us to consider in reference to some thing self-subsistent, and present to us as other from ourselves and no less real. Such is the faith in the existence of an external world, a faith confessedly preëxistent to, and indeed presupposed in the argument by which it is to be confirmed.

Expressing the function of the senses in less metaphysical terms, he states simply that objects must have been perceived aright before they can be rightly conceived,[31] and as a corollary to this rule, "They must have been rightly conceived before we can form legitimate abstraction or generalization, and in like manner . . . we must have rightly abstracted and generalized before we are in the condition of attaching appropriate abstract or general terms to the conceptions." This leads to an interest-

[31] He thus interprets the maxim, "Nihil in intellectu quod non prius in sensu."

ing discussion of the art of perception,[32] for Coleridge holds that perception is an art, dependent upon the discipline of the senses and the development of organized bodies of knowledge.

The chapter closes with an application of his canon of clusion, inclusion, conclusion to the apparent syllogism of Plato, which he translates, "To desire beauty is the essential character of love. But wisdom is a thing of all others most beautiful, Therefore to desire wisdom is the essential character of love."[33] He reduces the syllogism to a form in which the reasoning is formally complete, and then finds that it is necessary to ask the non-formal question, whether wisdom is actually included in beauty or not. A little reflection on this question, he finds, makes clear the fallacy involved.

The next chapter (pp. 190-212) begins with a short *résumé:*

> We have now reached the point at which it will be expedient to halt, tho' but for a moment, in order to review the road we have passed over that we may thus be able to form a distinct conception of the journey that yet remains. For in order to see distinctly what a thing is we must ascertain what it is not. Hitherto we have exhibited the essence, form and rules of common or universal Logic. Now the common Logic is either pure or applied; in the first, which alone we have given in its completion, we abstract from all empirical conditions, under which the exercise of the understanding takes place: we abstract from the influences of the Senses, from the interference of the Imagination, from the Laws of Memory, from the weight of customs, of inclination, of passion, and inclusively from the sources of human prejudices—in short we abstract from all causes from which any given and particular cognitions arise, or out of which any counterfeits of knowledge proceed—because all these respect the understanding circumstantially, under certain contingent occasions of its application, or of objects to which and by which the application was determined: but in order to the knowledge of these, experience is required.

Pure logic, he continues, appeals to principles *a priori,* principles derived "from the construction of the machine itself." It is a canon of the understanding. But, it is important to note, it functions also with regard to the Reason, "inasmuch as the understanding is the organ of the Reason, if not directly by

[32] See below, pp. 116-118.

[33] The "Symposium."

affirmation, yet indirectly by negation."[34] It is therefore a canon of the Reason also, "but only in respect of the formal—let the subject-matter be what it may, drawn from outward experiences, or from inward consciousness and reflection."

Roughly speaking, Coleridge finds that an instrument such as a sextant will serve as an analogue of the mind. We may consider, if we wish, the image that the sextant presents, that is, we may embark on the science of experience; or we may consider the way in which the sextant presents the image, or the science of the "universal subjective"—the science of measure and number and formal logic; or, again, we may consider the construction of the sextant itself. This last study,

> the investigation into the composition and constitution of the mind itself, yet remains the weightiest and worthiest of all contemplations if the Poet have said rightly,
>
> De coelo descendit γνῶθι σεαυτόν
>
> and that the knowledge of our intellectual nature is the substance and life of all our knowledge and the ground of intelligibility of all other objects of knowledge.

On the duty of the leisured classes to undertake this study he waxes eloquent, addressing himself to these classes generally, but with special reference to those preparing for the pulpit, the bar, the senate, the professor's chair, and the public press.[35] The study will resolve itself into the transcendental aesthetic and the transcendental logic (though he says that he prefers the term *critical* or *judicial* logic, to Kant's term, *transcendental*).[36]

Suddenly Coleridge seems to realize that he is here giving a second Criterion, instead of the expected Organum, and he tries to explain away the repetition by saying that the former criterion was merely an appendix to the canon or formal logic, "not a criterion, scientific and of course a-priori, nor derived from the sciential or transcendental Aesthesis." It was merely abstracted and generalized from experience, a result of comparisons and half-conscious experiments

[34] See below, p. 119, on the Platonic Dialectic.

[35] Cf. *Lake Poets*, p. 283.

[36] On the use of the terms "transcendent" and "transcendental," and on the originality of Kant's doctrine, see below, pp. 119-120.

which we are compelled by nature to make in order to exercise our senses for the purposes of self-preservation. . . . Though in making this confession we are not to forget that the main point in the marks that distinguish the man of superior mind consists in his doing that consciously, in the light of distinct knowledge and the sense of pure agency, which the many do unconsciously or rather can scarcely be said to do at all inasmuch as it is their common nature rather that does it in and for them.

The chapter called "Judicial Logic including the Pure Aesthetic" (pp. 212-245), is essentially an epitome of Kant's transcendental aesthetic as it is developed in the *Critique of Pure Reason* and the *Prolegomena*. In introducing the subject of intuition Coleridge finds occasion to discourse a little on one of his favorite subjects, the lax use of technical terms,[37] and his discussions of time and space include some amplifications of Kant's argument, some fresh illustrative material,[38] a few minor modifications, and a clear statement of his own position on the Clarke-Leibnitz controversy over the ideality of space.[39] On the whole, however, it is an attempt to instil the Kantian conception of intuition.

Three short chapters on analytic and synthetic judgments (pp. 265-281), do little but restate Kant, drawing on the *Critique* and the *Prolegomena* for their material.

The chapter "On Synthesis a Priori" (pp. 281-314), is of more interest as it gives in detail Coleridge's criticism of Hume on cause and effect. Coleridge takes as his point of departure Kant's statement that Hume threw no light on metaphysical knowledge, but struck a spark "from which light might have been obtained had it caught some inflammable substance and had its smouldering fire been carefully nursed and developed."[40] He cites Berkeley as anticipating the substance of Hume's chapter on cause and effect, but explains that

it was reserved for the Scottish philosopher . . . to bring the subject of causality into public discussion. . . . This second spark therefore cannot be said to have fallen on incombustible materials. It produced

[37] On the eclipse of philosophy and the use of technical terms see p. 121.

[38] See below, pp. 121-123. [39] See below, p. 121.

[40] Cf. Kant's *Prolegomena*, Einleitung. For passages from Coleridge's discussion of Hume and Kant see below, pp. 123-124.

great heat and volumes of smoke; but in reference at least to the Literati of France and Britain it kindled as little light as the former.

Coleridge agrees with Kant, that the reason no light was thrown was that

Hume's opponents came forward not as investigators but as adversaries who saw nothing in the subject that needed investigation.

Further, he deliberately and admittedly follows Kant's exposition of the situation, stating that

Mr. Hume denied neither the existence nor the expedience, nay! not even the subjective necessity of applying the notion of causality to the Phænomena of antecedence and sequence in nature. What he called on the Metaphysicians to do was to assign the origin of this notion, to give proof that it was not a mere prejudice, and to ground this feeling of a necessity on the rational conviction that accompanies insight.

Here Coleridge parts company with Kant.

Through the whole extent of human experience Mr. Hume admitted the existence and validity of synthetic judgments, and admitted too that by the same experience we were entitled because impelled to apply the causal connection or notion of Cause. Neither did the difficulty which attended this conception escape, nor was it indeed likely to escape so acute a thinker, viz, that of explaining the necessity involved in our conception of cause and effect. . . . No, he saw the difficulty and propounded a solution. And this solution it is which I confess, highly as I appreciate Hume's acuteness as a disputant and his talents as a writer, makes me sceptical as to the depth and comprehension of view which Kant, judging by the effect produced or occasioned on his own prepared and susceptible intellect, has attributed to David Hume on the score of this particular Essay. Hume's solution consists in assigning the origin and ground of the notion and the necessity conceived therein to custom, association, thus confounding in the first place the conception of necessity as a positive and essential constituent of the conception Cause with a confused negative inability to do otherwise; in the second place assigning as the cause of causality a something which itself presupposes a something which the writers deemed classical on this subject, Hartley, Priestley and Condillac and before them Hobbes had, by reducing all the phænomena of association to the law of contemporaneity, reduced them under the common law of cause and effect, but which phænomena, according to Mr. Hume himself who

had borrowed without acknowledgment a much more correct statement of the laws of association from Aquinas' commentaries on the "parva Naturalia" of Aristotle, do at least presuppose the principle they thus wrought to explain; and in the third place irreconcilable with the fact and contradictory to the very experience which is asserted to engender this conception. This last point has been ably set forth by Brown the son of the celebrated medical Theorist.[41] He has shewn what indeed needs but be mentioned to be remembered as the result of facts, that the function allotted to experience is that of checking and limiting the application of the notion, that children instinctively predicate a causal connection in almost every case of coincidence, that every influence which by withdrawing the mind from reflections on its actual experience produces the same effect on adults, that the want of experience does on children, induces the same promiscuous attribution as superstition, hope, fear etc. from the purse [hearse?] or coffin, from the fire, the stranger on the filmy grate, the letter and winding sheet on the candle, the numbers on the hackney coach on which my grandmother had twice dreamt [?] the prizes in the lottery, the gris-gris of the Africans, and the amulets and charms of the European empyric. In short it seems, like the air we breathe, to be ready everywhere to flow in where not forbidden and absolutely excluded by experience, or rather shall we say like the faculty of breathing which it requires an express volition to suspend?

There follows another refutation of Hume, to the effect that it is impossible to imagine mind itself before the time when the cause and effect notion was formed.

Then Coleridge endeavors to bring things to a head. Hume's solution, he argues, seemed to him so satisfactory that he refrained from adopting a necessary preliminary to a true solution, namely,

that of trying whether the problem could not be presented under a higher and yet more comprehensive formula, whether there were not other connections = x between A and B not included in A besides the causal connection? Whether causality or the relation of cause and effect be anything more than a specification or particular application of this higher formula which it shares only in common with other exercises of the judicial power.

Coleridge suggests that Hume's work was motivated to some extent by an interest in undermining religion, but says that this

[41] Cf. Thomas Brown, *Observations on . . . the Doctrine of Mr. Hume . . .* (2d ed., 1806), pp. 124-126.

fact does not necessarily mean that his work was without value. In the long run truth may gain from strict consequence even in dangerous error. He calls attention, however, to the conclusions to which Hume's doctrine led, the impossibility of presuming a spiritual antecedent for a material phenomenon, and the undermining of the doctrine of miracles, since "the necessity in the causal connection is, according to Mr. Hume, no act of the judgment, far rather it is no act at all; but a mere reflection of the animal sensibility, a passive feeling."

The difficulty with Hume was that, "adopting the opinion first maintained by Sir Kenelm Digby in his Treatise of Bodies and Soul," that mathematical and logical reasoning were purely analytical, he did not ask whether there were not other judgments in the same predicament with those of cause and effect. As his opponents did not help him, he threw no light on the matter, and would have accomplished nothing had not the seed found soil in the mind of Kant. "What Hume had only begun, this philosopher began anew and completed; and what he did the Student of Judicial Logic must now proceed to do."

The chapter ends with an anticipatory survey of what must be done in the remaining chapters of the Criterion.

We have therefore little more to do than to put the student in the way of proving for himself that all Mathematical reasoning is truly Synthetic or composed of Synthetic judgments *a priori*. When he has fully satisfied himself on this point, he will seek to understand how this Synthesis is possible and for this insight we have already prepared in the chapter on Transcendental Æsthetic or Space and Time as the forms *a priori* of the outward and inward sense. Of other synthetic judgments we shall thus have the negative character, viz. that the Synthesis is not conditioned by the pre-existing forms of the Sense, and may therefore anticipate their positive definition, viz. that this latter class have their condition and ground in the *a priori* forms of the Understanding, and with the enumeration and exposition of these forms, together with the rules deducible therefrom, we shall conclude the scientific part of judicial Logic or Logic as a Criterion. The rules and cautions afforded by empirical Psychology will form the appendix to this section, distinguished from the rules that are properly scientific, and belong to the Science of Logic. exempli gratia: the rules of definition, division, method, induction, etc., by the name of Maxims. And with this the treatise [ends] as far as it is a treatise on the causes or legitimate forms of conclusive

reasoning and of the criteria of the truth or falsehood of the premises as far as they can be learnt *a priori,* that is without a previous acquaintance with the particular subjects in question. But neither here can we take leave of the Science of Logic, in this its most scientific sense, without again calling on the Student not to finish his reviews of what this Logic *is* and can effect, without considering what Logic is not, cannot effect, or without adverting to the opposite errors, the delusions of Superstitions on the one hand, and the Sophisms of a faithless sensuality on the other, that have originated from the undue elevation of Logic and the Understanding as the logical faculty to an equal rank with Philosophy and Reason, or the undue degradation of the human Soul by subjecting all truth to conceptions formed from the Senses, or to the notions which the Understanding [makes?] for itself by reflection on its own processes.

In accordance with this prospectus Coleridge first gives a chapter on "Mathematical and Logical or Discursive Synthesis a priori" (pp. 314-338). For the main points of his exposition he relies on Kant, but he develops the subject in his own way. He reminds the reader again of Hume's error in taking for granted the analytic nature of mathematical judgments, and refers to Paley's remark on the ease of solution of a problem being proportional to the insight into its difficulties. The seriousness of the error of confusing analytic and synthetic judgments[42] is explained in detail. Briefly, it results in "trying to demonstrate truths of reason on grounds of the understanding." It has made inquirers demand for truths of religion and morality evidence of a nonmoral, hence inappropriate sort; it has been injurious to other related truths which conscience and moral experience have rendered it impossible to deny, by making their acceptance a verbal matter, devoid of insight. "And thirdly these dreams of demonstration have this inevitable consequence that the negative may be proved on premises equally undeniable by the Understanding, and by deductions equally logical as the affirmative."

The chapter ends with a re-statement of the accomplishments of Hume and Kant. Beginning with a figure taken from the game of Blindman's Buff, he says that what Hume "caught"

[42] On the difference between analytic and synthetic judgments see below, p. 125.

was so worthless and so untenable that it induced a more patient and dispassionate huntsman to seek the scent again at the point from which his predecessor had flown off, and having again once more caught it on the breeze, he follows it undeterred by the steep and difficult uplands whither it leads him, and

> Along the mountain's breast
> Stretches secure, and leaves the scattered crowd
> To puzzle in the distant vale below.

His next chapter, on Mathematical Evidence (pp. 339-347), begins with a reminder that mathematical reasoning consists of synthetic judgments *a priori,* and states that it is now necessary to ask how such judgments are possible. He indulges in a brief eulogy of mathematics, the science which "hath made Earth's reasoning animal her Lord,"[43] and after explaining what is involved in the problem at hand gives a *résumé* and analysis of his field, showing that an answer to the question, How are mathematical judgments possible? gives a partial answer to the broader question, How in general are synthetic judgments *a priori* possible? This question he deals with in a chapter "On the Ways and Means by which the Mind Arrives at Mathematical Evidence" (pp. 347-367).

Coleridge opens the chapter with an attempt to distinguish between certainty and evidence.[44] "We are certain," he says, "in as far as we know that it is impossible that the knowledge should be false." But evidence is a different matter. This he illustrates by citing the degrees of evidence in geometry, algebra, metaphysics, and the truths of induction.

Here he proposes three questions: What gives certainty to mathematics? What gives greater evidence to mathematics than to metaphysics? Why does geometry offer greater evidence than arithmetic, and arithmetic than the higher calculus or truths of induction?

After showing the difficulties in chemistry arising from the failure to apply the principle of the exhaustion of terms, he returns to the question of the mathematician, and says:

> The first distinction . . . of the Mathematician is that having first demanded a power, which no man can deny, he begins by

[43] Cf. "Religious Musings," l. 220. [44] See below, pp. 125-126.

making his own terms.[45] In all philosophical and historical disquisitions the definition most properly should form the conclusion, as the result of the reasoning. If the writer commences with it, it is either by anticipation for the purpose of determining the reader's thought to the especial object proposed by the enquirer.[46] . . . In the Mathematics on the contrary I begin with the definition. By the postulates, I assert my power of productive action: by the definitions I determine what the product shall be, and by what name it shall be known. These elementary products and the simplest constructions and integrations of the same are my definitions. By an act of my will I think four straight lines that inclose a plain space so that the opposite sides shall not be parallel and I call the figure that results from this construction a trapezium.

To suppose oneself deceived under such conditions is as absurd as the case of

the simpleton in one of our old plays, whom the poet introduces fresh from the wonders and sight-baffling sights of a pretended magician and which have left him so doubtful respecting the evidence of his senses, and so proud of his newly acquired scepticism, that speaking of a blazing fire he exclaims this fire does not really burn, it only seems to burn; but it does not really seem, it only seems to seem.

Now in the Mathematics the producing act and the product are one and indivisible.

In the process of constructing a cone, for instance, we find that

it is . . . a synthesis ab intra. But this power must be presupposed in order to the possibility of contemplating the outward objects in similar relations. Vide Transcendental Æsthetic. It is therefore a Synthesis a priori. It is necessary: it is universal. . . . Vide the Menon of Plato.

But secondly, and which distinguishes the Mathematical evidence from the logical, as the former contra-distinguishes it from the experimental, the Mathematician always and essentially reasons intuitively. . . . The conceptions of the logician and the philosopher may be accompanied with intuitions mixed or pure, may be illustrated by them; but that of the Mathematician *must* be presented *intuitively*. . . .

But here the difficulty seems rather to increase than diminish, for how is it possible for us to have intuitions without the presence of the object?

[45] Cf. second Essay on Criticism, Cottle, *Early Recollections,* II, 208.

[46] The alternative was omitted in the MS.

In answering the question Coleridge follows, loosely, sections 8 and 9 of the *Prolegomena*. It is possible, he finds,

> if the intuition and these particular constructions of the same contain nothing else but the forms of the sense. . . . In short, knowledge *a priori* is possible but *possible* then only when the knowledge and the object known, the scire and the scitum, are one and the same.

It is necessary, he says, only to refer to the preceding chapters on time and space as the universal forms of the sense, and then to consider any simple mathematical operation, to answer the three questions, How is knowledge *a priori,* or synthetic judgments not experimental, possible? How is mathematical knowledge in particular possible? How do mathematical judgments differ from other synthetic judgments *a priori?*

Then, following Kant for part of his discussion, he expounds the typical mathematical processes, using illustrations from geometry and arithmetic. He again refers the reader to the Transcendental Æsthetic. He brings the chapter to a close with the following proposition:

> The higher we advance in the higher calculus, or in what is mathematically called the transcendental analysis, the more does the mathematical reasoning resemble the logical, differing from it indeed, in this respect, that though the reasoning be in abstracto, yet this abstraction must be capable of being resolved into intuitions, or at least there must be a certainty that intuitions are the grounds and constituents of the certainty. Otherwise it would cease to be mathematical and be merely logical. The preceding remark supposes a greater acquaintance with the higher mathematics than I am entitled to suppose that my reader possesses or in fact than I myself possess, if the remark requires anything more than simply to know from authority that so it is, and to understand from the nature of things that so it ought to be.

A chapter "On Synthetic Judgments *a priori* other than Mathematical, or on the *a priori* connections of the Understanding, or Logical Conceivability" (pp. 367-396), serves to introduce a discussion of the Kantian categories. A *résumé* reminds the reader where he stands:

> We have seen then, that *Mathematical Science* is grounded in the intuitive faculty itself, and consists of the acts and products of this faculty, that is, pure intuitions and constructions *a priori;* and that

in this view and this alone, we are enabled to comprehend, how the positions or judgments of the mathematician should be *Synthetic,* no less than the judgments *a posteriori* (that is the combinations ascertained by experience) and yet necessarily certain and apodictic, which no judgments merely experiential are or can be. We have arrived at this insight by the transcendental deduction of our conceptions Time and Space as the universal forms of the sense, that is, of the sentient faculty considered abstractly from its objects; and we see that without this deduction, and without granting moreover the postulate, which it suggests to us, that whatever is presented to our senses (to the *outward* senses in Space, and to the *inner* sense in Time) is contemplated and apprehended, as it *appears* to us, not as it is in itself. . . . We might indeed have found ourselves compelled to admit the *fact* of Mathematical certainty, but how such a fact is *possible,* we must have remained ignorant. We might have *known* it; but we could not have *understood* it. And lastly we have learnt the distinction between certainty and evidence; more than this is beyond the bounds of logic, either common or critical; the attempt if made at all belongs to *Noetic,* or the Doctrine of Ideas.

Opposite this page Coleridge notes, "The reader who wishes to enquire further and will either not wait for, or who deems himself entitled to reject *a priori* such a doctrine I can only refer to the concluding paragraphs of the chapters on Transcendental Æsthetic."

Here Coleridge calls attention to the fact that mathematical truths are applicable to things of sense, not spirit, and further, that among the things of sense mathematics is most applicable to those that are most homogeneous with itself, such as extent, mass, weight, and motion.

Before continuing he finds it well to consider closely the adage of the Aristotelian and Epicurean schools, "Nihil in intellectu quod non *prius* in sensu." In addition to what has already been done generally, guarding against the undue extension of the maxim by adding the Leibnitzian "præter ipsum intellectum,"[47] it is necessary to consider the word *prius.* For it might be understood to mean that we can reason by perceptions, possess intuitive knowledge without any conceptions. But conceptions are necessary. Further, it is only when conceptions and intuitions are "subsumed under some pure conception some one of the inherent and constituent forms of the Understanding"

[47] Cf. *Aids to Reflection,* p. 218, note.

that they are "capable of being combined into a judgment that has real validity and significancy."

He takes an occasion offered for a digression on the proposition, "Terms that can be rightly opposed to each other in the evolution of a truth must be identical in the root, that is, radically one";[48] illustrates what is meant by pure conceptions of the understanding from the category of quantity; considers the adequacy of the name "conception"; and closes with a restatement of his field of investigation:

In that higher department of Logic, which we are now investigating, we have two objects in view: first, to learn what the Understanding in connection with the forms of sense and the affections of the sensibility can do; and secondly and of no less practical importance, what it can*not* do. The former we may call the sphere of the Understanding: and this alone is the rightful sphere of Logic; as *Logicians* therefore, and even in opposition to our *philosophic* creed, we may take it as the total sphere of the human mind: and we are induced to treat it as such not only because by thus insulating the subject we may contemplate it more distinctly; but likewise and chiefly, because we cannot compel an opponent to admit the contrary by arguments purely speculative or on premises which it is not in his power to deny if it should be his choice. But though we are incompetent to give a scientific proof of any other and higher source of knowledge, it is equally true that no Logic requires us to assert the negative, or enables us to disprove that a position which is neither theoretically undeniable nor capable of being logically *concluded,* may nevertheless be morally *convincing* or even philosophically evident.

There is one thing, however, that Logic does peremptorily prescribe—or rather it is a requisition of common sense, the giving effect to which is one main end of the study of Logic—namely, that whatever term we use, and whether we assert or deny a correspondent reality thereto, we should use it in some fixed and appropriate sense and consequently that we should pre-define it when there is any chance of its being understood in any other sense.

By way of illustration he takes the term "Ideas," and gives his own definition:

Those truths namely (supposing such to exist) the knowledge and acknowledgment of which require the whole man, the free will, no

[48] Coleridge's translation of one of his favorite maxims, "Opposita semper unigena."

less than the intellect, and which are not therefore merely speculative, nor yet merely practical, but both in one. . . . And now then we return to the scientific and didactic, our subject being henceforward directly and exclusively, of the human Understanding and its constitution, that is, the Elements of transcendental Logic, in the strict and most proper sense of the term, and as a positive science.

A chapter entitled "Of Transcendental Logic Positively" (pp. 396-444), continues the preparation of the reader's mind for the discussion of the categories. It includes a definition of the understanding as a substantive power; a comment on Baxter's contribution to the method of trichotomy;[49] mementos on matters of verbal usage,[50] the demarcation of the field of study, and what had been accomplished in the argument to date; a careful distinction between productive or antecedent and consequent unity, and definitions of the terms *function* and *function of a power* (these as aids toward investigating the functions of the understanding); and finally Kant's table of the judgments and his remarks thereon, modified and amplified to some extent.

In his discussion of the Understanding as a substantive power he gives his familiar caution, that, while all objects of the Understanding must be *entia logica,* they are not necessarily *entia realia,*[51] that is, "having a correspondence to realities outside of the mind." Of the eight mementos, the seventh may well be quoted in full, as it attempts a succinct outline of the whole work:

The very title of our science leads us naturally to the two Parts, into which it is subdivided: viz. first the necessary *forms* and connections of all legitimate discourse, and the *rules* generalized from the same resulting indeed from the constitution of the discursive faculty itself, but evident of themselves and therefore capable of being given independently of the knowledge of the latter; and secondly the Analysis of the Understanding in order to a knowledge of its constitution—which however could not have been effected or made intelligible without a previous analysis of the Sense: both con-

[49] On trichotomy see below, p. 126. Cf. *English Divines,* II, 106-107.

[50] For the parenthesis on words and images that occurs in the first memento see below, pp. 126-127.

[51] Cf. *Notes Theological,* p. 146, and autograph note on a flyleaf of Vol. IX of Tennemann's *Geschichte der Philosophie,* referring to p. 348 (British Museum, C. 43. c.).

junctively taken forming the science of *Transcendental* Analysis, so called from the character of its aim and object, which is to rise from the *knowledge* or *matter* of consciousness, to the *faculty* by which it is known or presented. The former of these two main divisions we passed through under the name of the common, or Syllogistic Logic, or the Logical Canon: and of the latter, first introduced as the pure Logical Criterion, and then more definitely named the science of Transcendental Analysis, comprised under two heads, Transcendental Aesthetic, or the Analysis of the pure Sense, or *Faculty* of Intuition, and Transcendental Logic, or the analysis of the Understanding, or discursive faculty, we have completed the first head (namely the æsthetic) and prepared for the accomplishment of the remainder by a large declaration of the historical origin and true nature of the question, and exact exposition of the terms to be employed in its solution, and by such other notices and reminiscences as seemed calculated to facilitate our progress either directly and, as it were, *propulsively,* or indirectly by the removal of possible obstacles, misconceptions, for instance the errors of prejudice and the mistakes of inadvertence.

The last chapter that the manuscript contains is an exposition of the categories. Coleridge gives Kant's table, affirming that it is

the Inventory of all the original pure conceptions or synthetic forms that the Understanding contains in itself and *a priori,* and by virtue of which alone it is capable of being contemplated as a pure Understanding (Intellectus purus), a faculty having a proper subsistence and not merely a receptivity or passive result of other powers. For by these alone we understand a something by the manifold that is presented to it by the Sense, the Sensibility, and the Senses as the union of the two. But to understand a thing is to think of it as an object.

Adding some illustrative material and an exhortation to the student to test the table out for himself with any judgment he chooses to make, he offers six remarks.

Remark the first, not included by Kant, calls attention to the similarity of the two tables (the judgments and the categories), and the natural necessity for such similarity.

Remark the second compares Kant's and Aristotle's tables of categories. Kant's table has a guiding principle, being evolved from the analysis of the understanding itself, while Aristotle's has none. In this Coleridge follows Kant closely.

Remark the third follows Kant loosely on the reasons for not going into the matter of derivative conceptions.

Remark the fourth follows Kant's first "observation," but gives more in the way of detailed exposition.

Remark the fifth calls attention, again following Kant, to the fact that the mathematical categories have no correlatives.

Remark the sixth, on trichotomy, is developed at much greater length than the corresponding comment by Kant:

> Under this head we refer to a former chapter in which we have spoken at some length on the noticeable trichotomy both in the table of judgments and in that of the categories. The circumstance I mean of there being the same number of species, three to wit, under each of the four heads, whereas in the common or canonical Logic, that is, in all classification *a priori* by means of conceptions, the form of Dichotomy obtains. But in addition to this remark we have now to observe another not less noticeable circumstance, viz. that the third category arises in all cases out of the conjunction of the first and the second of the same genus. Exempli gratia, unite the conception of *many*, and that of the *one* and there results the conception or predicament of *All*. So by the conjunction of Reality and Negation we obtain the notion of Limitation as in the instance of light, darkness, gloom, or twilight. Thus too Community or reciprocal action is but the notion of Substance conjoined with that of Causality which is possible only by two or more substances all equally in the relation of Causality. And lastly the notion of Necessity or the third species of Modality is nothing more than an Existence the affirmation of which is contained in its possibility, or as the common phrase truly as well as happily expresses it, the very notion of which supposes its reality. But here we must be on our guard not to infer from this fact that the third category in each of the four kinds is a merely composited thought or what the followers of Mr. Locke would call a complex in opposition to a simple Idea, that it is a mere general term or term of remembrance, or mark common to two things by means of which we remember both and consequently that it can have no place among the elementary notions or principles of the Understanding.

"LOGOI"

In the early periods of the human race and at present, whenever a scanty population is spread over a large and uncultivated domain . . . man is comparatively a silent animal. Conversation is almost confined to affairs of moment. The conventions themselves are entitled Words—or some equivalent term, as for instance the palavers . . . of the Africans. We might therefore expect, that the particular speeches, the harangues of the individual, should be distinguished from the light or ordinary talk by some appropriate name. At all events, we may expect to find it so, whenever, as was the case in Greece, the race, climate, geographical circumstances and above all the confluence of kindred tribes, were favourable to the formation of a copious language. Then it was, that select, considerate, well weighed, deliberate words were named λόγοι in distinction from ῥῆματα.

COLERIDGE, Manuscript "Logic."

FROM THE "LOGIC"[1]

ARISTOTLE'S INVENTION OF LOGIC

IT is not indeed improbable that Aristotle himself, who in his logical and metaphysical works has devoted so large a space to the principles of Definition, Distinction and Distribution, was led to the subject by the experience required in his *physical* researches. Impressed with the necessity of method to the successful cultivation of Natural Philosophy, and sensible that a method which should be suited to all understandings must be drawn from the laws and constitution of the understanding itself, he invented LOGIC as a supplement to Mathematics and the other organ (ὄργανον δεύτερον) of the *Real* Sciences. To this view of the art . . . we may, I repeat, not improbably attribute the noticeable fact that in one and the same great mind we venerate the Inventor of Logic and the Father of Natural Philosophy. (I, 4-5.)

WATTS AND CONDILLAC ON LOGIC

In some of these[2] (as in Dr. Watts' Logic, for instance) the essentials of common Logic, which have remained without change from their first promulgation by Aristotle and which are indeed as little susceptible of change as the rules of common Arithmetic, are to be found, but so blended with Metaphysics, Theology, Psychology,

[1] British Museum MSS, Egerton 2825 (Vol. I), 2826 (Vol. II). The titles given to the excerpts do not appear in the manuscripts.

[2] I.e., the most popular modern French and English books professing to teach logic.

Grammar—and in short what not? that had it been the professed objects of these writers to teach the art of Comparison instead of the science of Method they could scarcely have adopted a more successful plan. In the far famed Logic of Condillac, on the other hand, the student may find the whole theory of *Materialism* (borrowed without acknowledgment from David Hartley)[3] only not one syllable of Logic itself. (I, 5-6.)

THE EDUCATION OF NATURE

In the infancy and childhood of individuals (and something analogous may be traced in the history of communities) the first knowledges are acquired promiscuously.—Say rather that the plan is not formed by the selection of the objects presented to the notice of the pupils; but by the impulses and dispositions suited to their age, by the limits of their comprehension, by the volatile and desultory activity of their attention, and by the relative predominance or the earlier development of one or more faculties over the rest. This is the happy delirium, the healthful fever of the physical, moral and intellectual being,—nature's kind and providential gift to childhood. In the best good sense of the words, it is the light-headedness and light-heartedness of human life! There is indeed "method in't" but it is the method of nature which thus stores the mind with all the materials for after use, promiscuously indeed and as it might seem without purpose, while she supplies a gay and motley chaos of facts, and forms, and thousand-fold experiences, the origin of which lies beyond the memory, traceless as life itself, and finally passing into a part of our life more rapid than would have been compatible with distinct consciousness and with a security beyond the power of choice! Or shall we call this genial impulse a will *within* the will, that forms the basis of choice and the succedaneum of instinct, which the conscious choice will perfect into knowledge? Promiscuously, we have said, and seemingly without design; and yet by this seeming confusion alone could nature (by which we would be always understood to mean the Divine Providence in Creation) have effected her wise purpose, without encroachment on the native freedom of the Soul and without either precluding, superseding, or overlaying the inventive, the experimentative, combinatory and judicial powers. (I, 8-10.)

THE STUDY OF GRAMMAR

The charters and other records of our oldest schools, both of those exclusively intended for the instruction of the more numerous class

[3] Cf. *Theory of Life*, p. 61, note.

in and for their own rank (exempli gratia Sir Roger Cholmondely's School at Highgate, founded in Elizabeth's reign) and those of a mixed character, in which provisions were made for raising a certain number of the more promising scholars into a higher rank, and qualifying them for the learned professions (among which Christ's Hospital, never by me to be named without reverence, stands prominent) furnish striking proofs, how highly our great ancestors, the Fathers of our Church and the lights and pillars of Protestantism throughout the world, appreciated the advantages of learning, *in conjunction with common Arithmetic,* the A B C and the rudiments of Grammar, independent of any further progress in the learned languages and without the remotest view to the study of the books therein written, or to what we now call *Classical Scholarship.* (I, 32-33.)

FABLES

"That fables are likewise entitled λόγοι, or λόγοι—[4] will surprise those only who, misled by the unwise custom of putting books of fables in the hands of children, have forgotten that the original, and at all times the most pertinent use of Apologues, was in speeches on delicate and hazardous subjects, addressed to kings, or unruly popular assemblies. The fable of Jotham, the earliest on record; that of Menippus, might be cited in proof, if indeed the subjects and purposes of all the ancient fables (those of Phædrus are undoubtedly modern) did not suffice of themselves to convince an intelligent reader." (I, 45.)

HISTORY AND POETRY

A chronicle can of course have no closer connection than what the circumstances of time, place, and the identity of the agent, in a series of acts or fortunes, may supply; what is more than this must be given by the skill, or the passion of the narrator: thus the meaning of the word λόγοι as histories, was limited by ἔπος from εἰπεῖν, ἐπεῖν, in the sense best preserved in [ἔπομαι?],[5] sequi, to follow—to follow in close order.

A skillful arrangement of events and harangues, to an artful and harmonious whole, was an Ἔπος an Epic Poem; the poet Ἐπο-ποιός

[4] Blanks in the text represent blanks left by the amanuensis in the manuscript.

[5] As in other cases in the "Logic," Greek phrases were inserted by an amanuensis not learned in the language. The reading here is uncertain, but apparently it is an instance of Coleridge's philosophical predilections getting the better of him. On Coleridge as a philologian see J. H. Hanford's article in *Modern Philology,* XVI, 615-656.

or simply ποιητής, the maker, to distinguish him from the historian, who received the form and sequency of his narration, no less than the contents, from the actual occurrences. He alone can be appropriately styled a poet, who, whencesoever he may have derived the materials of his work, supplies the form, connections, and unity, from his own mind, or as both the piety and humility of the early poet dictated, from his genius, his muse, or special Ἀγαθοδαίμων. That such works among the Greeks were all metrical follows from the process above given and indeed flows out of the nature of the language itself.

It is however the Εἶπος,—the ποίησις, the contexture, the original infusion of the poet's own shapings, that constitutes the essential qualities, ἐπο-ποιία, and distinguishes the Waverley or Guy Mannering, with no less propriety than the Marmion and Lady of the Lake, from a λόγος or λόγοι of the Chronicles.

Soon, however, the happy genius of Greece inspired a portion of the same power into the words of her prose narrators, but working by different means. Intelligent research came in the stead of invention; thought and reflection supplied the links of causation and formed while they explained, the connexion of events and their common relation, as parts of one comprehensive scheme, either general, or what we now call the Ways of Providence, or for the manifestation and evidence of some particular purpose or moral as in Thucydides.

The λογογραφία or record of weighty matters, of memorabilia, was elevated into history (ἱστορία ἱστόρησις from ἱστορέω, to search into, make a diligent enquiry concerning) and the logograph into the historian. (I, 46-48.)

LEARNING AND WISDOM

Learning [in the early days of Greece] was a servile attainment as opposed to the ingenuous, or the distinctions suitable to free men or citizens, which in this point of view we might not inaptly render—gentlemen. We may refer to the well known passage of Pindar: He alone is the wise man who understands much out of himself—but they who have learnt—the learned, pour forth empty words as the crows clamour against the doglike bird of Jove.

This state of feeling, as associated with learning and the learned, could not be permanent; though the substantial part of the distinction, that which discriminates immediate knowledge from such attainments as were communicable by words, or otherwise passive impressions, will forever retain its worth and full value. Pythagoras himself, who modestly substituted the title φιλόσοφος for the σοφός,[6]

[6] Cf. *The Friend* (1818), Vol. III, Essay 3, p. 112.

has already prepared for this change by giving the name of —— that is, the learning and —— things to be learnt, to the study and contents of mathematics, in which he included music and rhythm as a preparatory discipline or προπαιδία through which the pupils were to pass on their road to wisdom or the knowledge of the immediate. The original sense of the term was still so far present, that the —— and the ——, the acquisition and the acquirements, were still subordinate: but they acquired a respectability by being employed in the service of that which was excellent on its own account. A still greater influence was exerted by the writings of Herodotus and of Hippocrates, or rather the accumulation of knowledges derived from experience, the fruits of research. It became evident that the man who depended wholly on his experience, was poor and unprovided for the contingencies of life, compared with those in whose memory as in a storehouse, the fruits of many men's experiences were preserved; that with the same degree of natural understanding or mother wit, the man who had appropriated to himself the judgments, the ends proposed, the means adopted, the results confirmatory or dissuasive, of all those who from tradition, whether fixed or still oral, were known to have distinguished themselves in any given office or exigence, would enter on such an office better qualified for the performance of its functions, would meet with that or other equivalent exigence with less probability of being taken by surprise, than any merely self taught man at the conclusion of his career. Thenceforward learning could not but dignify the possessor, and the communication of the same advantage to others, by collecting records and by comments and verbal interpretation, removing or lessening the difficulties which the collector and communicator had himself struggled with, could not but become merit, increasing with the progression and increase of human experience. (I, 52-55.)

THE REASONING PROCESS[7]

There are few who cannot recollect or place themselves in that state of mind in which their eye has rested either on a cloudless sky or the general aspect of the starry heavens or on a wide common bounded only by the horizon, without consciously attending to any particular object or portion of the scene. There will be many too, I doubt [not] not unwilling to confess that they have been sometimes in that state of mind which they could perhaps describe by no other term than that of thinking, and yet if questioned of what they were thinking about must answer, nothing. Nay, this is a state which not

[7] Somewhat condensed for the sake of needed simplification.

seldom takes place when the mind is preparing itself for the highest efforts of thought and even during such efforts, the energy continuing during the momentary occultations of the past objects of the consciousness, as we continue the act of gazing in the brief intervals of the flashes at night in a storm of thunder and lightning.

Well, we will suppose our eyes to have rested on a waste common with that absence of attention to any particular object or portion of the same to which we have referred. Some accident or other, some sudden recollection that has started up and been particularized in the mind itself, or a sudden gleam of sunshine which has formed a sort of brighter island on the waste, has directed our conscious attention to some one portion. We describe the outline and so distinguish it and set it apart as it were abstractedly from the rest. Previously to this it was evident that there was no conscious attention existing, consequently none that we could draw away from any one object to another; but now we have two objects present to our consciousness and as it were candidates for our voluntary attention, that contained within the outline and that which it excludes and relatively to the mind contemplating it separates itself from. . . . We will suppose then that at some after time the conversation turned on some part of this common. [Whether the common itself is bounded by the horizon as in universal propositions or by a ring-fence as in particular ones is immaterial; Coleridge uses both instances.] We will suppose too that we distinctly recollected this as a part of the common and that we had known that the subsoil of the whole space was calcareous. We could not hesitate in concluding that in this supposition the subsoil of the portion included must be so likewise. Now in syllogistic Logic the larger or including space is named the Major or superior position of the Syllogism and this again divided into the subject, which would correspond to its boundary, which in universal propositions we have compared to the horizon and in particular propositions to the ring fence. On the other hand the field or plot which from some cause or other had attracted our attention so that we had a distinct and secure recollection of its having been a part of the area above mentioned, only contained or included within it, corresponds to the Minor of the Syllogism, the field or plot being the Minor subject, but the predicate of this subject is simply that of its having been contained, and in as far as what is said of all must be true of each, one with the subject of the Major. We may therefore affirm that the subject of the Major is the predicate of the Minor. All that common land is calcareous; but such a field is common land. But if the subject of the Minor in this sense is one with the subject of the Major the predicate of the Major is of course in

the same sense the predicate of the Minor and the expression of this as a necessary consequence we name the Conclusion: accordingly we add therefore, the field is calcareous, and the Syllogism is completed. (II, 8-10.)

RULES AND PRINCIPLES IN CRITICISM

We may commence this inquisition by defining the Reason (I mean solely in reference to the logical process) as the Source of Principles, the Understanding as the faculty of Rules. The Reason is all *end,* summa finium, the Understanding all *means,* summa mediorum. Thus rules are in all cases means to some end, a truth the oversight of which is exemplified and may be profitably illustrated by the false conclusions of certain French critics, who, having borrowed the rules of tragedy which Aristotle had abstracted and generalized from the composition of Aeschylus, Sophocles and other Greek poets, treated them as ends to which all the parts of every tragedy were to be adapted as means, a conclusion which was of necessity false as often as the ends proposed by the Greek dramatists or imposed on them by local and accidental circumstances . . . were different from the ends proposed by the modern poets or imposed on them by their local and accidental circumstances. The science of Criticism dates its restoration from the time when it was seen that an examination and appreciation of the end was necessarily antecedent to the formation of the rules, supplying at once the principle of the rules themselves, and of their application to the given subject. From this time we have heard little (among intelligent persons I mean) of the wildness and irregularity of our Shakespeare. Nay, when once the end which our myriad-minded Bard had in view, and the local accidents that favoured or obstructed or in any way modified its manifestation are once thoroughly comprehended, the doubt will arise whether the judgment or the genius of the man has the stronger claim to our wonder, or rather it will be felt that the judgment was the birth and living offspring of his genius even as the symmetry of a body results from the sanity and vigour of the life as the organizing power. This subject on the one hand requires so particular and heedful an inquisition, and on the other hand is of an importance and fruitfulness so well calculated to remunerate the pains and patience requisite for its investigation, that I need not apologize for having introduced it by an instance of its application that at first sight would seem remote and almost alien from the dry pursuits and unattractive interests of a formal science. (II, 35-38.)

THE INTUITIVE IMAGINATION

But the happiest illustration of the act of the intuitive imagination and its close connection with its product in the mental diagram (I believe the most exact, but assuredly the most amusing mode of conveying what I mean) I have seen in the Ephemeræ and other minute and half transparent insects who by the exceeding velocity of motion actually present to our eyes a symbol of what Plotinus meant when speaking of the geometricians and then of Nature as acting geometrically he says θεωροῦσα θεωρήματα ποιεῖ,[8] her comtemplative act is creative and is one with the product of the contemplation.

Réaumur[9] describes with great eloquence the emergence of a world of Ephemeræ from a river as seen by torch light; he represents the moving transparency as composed of Ephemeræ in jointed and articulated triangles of silver light, and these things the great naturalist appears actually to have mistaken for real and produced by the contact of the flies. The light of the flambeau exhibited a spectacle which enchanted every one that beheld it. Never had an armillary sphere so many zones as there are here circles having the light for their centre. There was an infinity of them, crossing each other in all directions and of every imaginable inclination, all of which were more or less eccentric. Each zone was composed of an unbroken string of Ephemeræ resembling a luminous strip of silver lace, formed into a circle deeply notched and consisting of equal triangles placed end to end so that one of the angles of each triangle touched the middle of the base of the triangle preceding, and all moving with astonishing rapidity. The wings of the flies (says Réaumur) formed this appearance. I can however add my own testimony to that of Messrs. Kirby and Spence in their delightful Introduction to Entomology; who consider, or I venture to say have ascertained, that this was a visual deception of Réaumur, well as he deserves the praise of the most accurate observers. Walking in the daytime with a friend, our attention was caught by myriads of small flies which were dancing under every tree. Viewed in a certain light they appeared as the Ephemeræ did to Réaumur, a concatenated series of insects moving in a spiral direction upwards, but each series upon close examination was produced by the astonishingly rapid movement of a single fly. So far Spence, but I can add that I have twice seen the ascent of Ephemeræ in a strong moon-light, the beams pass-

[8] On Plotinus and nature's geometrizing see *Biographia*, I, 254 (Chap. XII).

[9] The illustration is taken almost *in toto* from Kirby and Spence's *Introduction to Entomology* (1815-16), II, 370-371.

ing through an opening in a branching tree that overhung the water on which the moon-light formed a small island in deepest shade, and here by intensely watching the phenomenon I satisfied myself, that the different spiral figures were each produced by the image motion, which the single insect left on the eye; each of which overtook the preceding before the impression had ceased, on the same principle as boys produce the circle of light by a piece of kindled charcoal whirled rapidly around. (II, 50-53.)

NEGATION

The clear way of stating the true force of the negative is as follows. It is a fact of universal consciousness that man possesses the power not only of beholding A and B but noticing that they are two and different; hence if he reflect on B in immediate succession to A so that B comes while A is still present to his thoughts, in which memory and the condition of all comparison consists, he soon discovers an abbreviation for the two positions A = A, B = B in the words A is not B, this *not* having been probably first derived from some painful feeling occasioned by his having looked for one thing which he was desirous to have and finding another which was nothing to his purpose—looking for parsley, for instance, and finding hemlock. The gesture, the motion of the head, the impatient shrinking from the object and the correspondent motions in the organs of speech, produced and still are found to produce in infants that particular modification of sound which may be traced more or less distinctly in the simple negatives of all languages. . . . It is not therefore so properly a *perception* as a *sensation* connected with some one perception in consequence of some other having been and still being in the fancy connected with the feeling of expectation. It is curious to notice in ourselves that preparation which we make for an increased degree of vividness which we expect from the senses when we are on the point of seeing something which is already present to the mind's eye; a feeling not unlike that which we experience before the presentation of the moon through a glass. But in proportion to the degree of pleasurableness of this expectation and pre-assurance is the disappointment, and when by the frequent repetition of such occasions the sensation is become evanescent and the tones of passion are no longer heard, that abbreviation, that compression and welding as it were of the two into one, remains in use from its convenience and the *not* becomes the mere sign or character of connection by comparison. (II, 89-91.)

THE CRITERIA OF TRUTH RELATIVE TO COMMUNICATION

[The criteria vary with the occasion and the purpose, Coleridge argues, but may be reduced to two.] First, common usage, and in civilized and cultivated societies the usage and authority of the best writers; but where these are imperfect and not only different shades of meaning are found expressed by the same word, but even diverse meanings, then we have no other criterion than to determine the word to some one of these meanings, and if there should be another word used synonymously, and as most often happens equally equivocal and unsteadfast in its application, to approximate this; and if there be not, we must either borrow a term from some other language or invent one in the mint and from the materials of our own, or lastly be content to convey our meaning in a periphrasis, and supply the want of the proper term by the definition. For the rude and ponderous masses, our corn, hay, coals, and timber, the weighbridge will suffice, and for the commodities of the market generally the steelyard and the ordinary scales differing more in their dimensions than their accuracy; but medicine must have its appropriate weights and the goldsmith and the jeweller their gold and their diamond scales, and the experimental philosopher seeks from the artist an accuracy yet more nice, even though at the cost of a more complex machinery, and the final result not obtainable without the aid of calculation. We may apply this to the investigations of truth speculative, moral, or historical. The common usage is but the weighbridge, and even the authoritative sanctions of celebrated writers only the steelyards and the weights and measures of the market enjoined by public authority; the investigator must use the gold scales of precise definition; never indeed wantonly deviating even from the common usage, still less rashly rejecting the sense attached to the term by his more celebrated predecessors in the same pursuit; but yet preferring the interests of truth to all (amicus Plato—amicus Socrates sed magis amica veritas);[10] and well knowing that accuracy, which in this case demands the fixation of the magnetic needle to one point, a thing possible, indeed, only when we are masters of our own poles and can, as it were, construct our own world, or, at least, to suffer no variation without giving at the same time requisite warning. (II, 129-131.)

[10] A phrase attributed to Aristotle.

DEFENCE OF THE SCHOOLMEN

The old map makers were allowed the privilege to fill up the interior of Africa with giants or pigmies, mountains or abyss, griffins, elephants, and wildernesses of land rendered doubly uninhabitable by monstrous serpents. A liberty not altogether unlike this the critics and metaphysicians of the last century and more have taken with the writers of the middle ages; or it would be incomprehensible how the charge could have originated against the schoolmen and the earlier Reformers, of neglect and laxity in the definition and discrimination of their terms. It is impossible to turn over fifty pages of any one of the scholastic commentators and not to perceive that the fault, that might truly be laid to their charge, lies in the opposite extreme—excessive anxiety in the detection and display of distinctions almost always just and subtile, but too often unfruitful. It might seem as if the whole mass were crystallizing into needles. I am not ignorant, nor unwilling to concede that their premises too often stand in contrast with the process, as must needs be the case when the first ground is not taken at a right and sufficient depth: though even in this respect it would not be difficult to give the most convincing proof by a series of instances containing the most important subjects of human disquisition, that even, in this respect, they are superior to the age that succeeded them almost to our own days in all questions properly philosophical, or when the subject does not consist in the objects or notices of the bodily sense. When, however, facts or matter of fact are concerned, the student would find it neither uninstructive nor unamusing to compare (I will not send him so far back as to the masters of the school, no nor even to the systematized Divines of the fifteenth or the former half of the sixteenth century)—let him compare a volume of miscellaneous tracts published during the interval from the death of Elizabeth to the Restoration with a similar volume from the last century. I am much mistaken if there should not be found at least as marked a superiority in the logical connection of the sentences, in the correct use of the conjunctions, and other exponents of the connecting acts in the mind, in short as marked a superiority in the propriety of the statement and the legitimacy of the consequences, on the part of the elder writers, as there is of good sense and accurate observation in those of our contemporaries. (II, 150-152.)

WORDS

Before we can safely decide whether a controversy is fairly reducible to a dispute about words, we ought to understand clearly and

distinctly what is meant by words, even when a word is proved equivocal and when the delusion is effected by placing the word in one sense in the premise while the conclusion follows on the supposition of the other. Ridentem dicere veram quid vetat? The mere wish of relieving the subject might be a sufficient apology if from the crowd that present themselves to the mind I select a trivial and ridiculous instance in preference, but in truth I have other and more serious purposes in view, and such preference forms part of my plan for reasons which I shall hereafter explain; to the instance however. A country Squire, one of the reverend Vegetables so exquisitely portrayed in the 86 No. of the Tatler, having for the first time left his home far inland for Ramsgate, had been further tempted to join a sailing party in a trip to Calais. From the state of the weather the opposite coast was invisible till within a league of Calais, our worthy voyager still keeping his face toward old England, when all at once the mists dissolved and the French cliffs bursting on the view, the master of the boat turned him suddenly round exclaiming: There Sir! that's France! You don't say so, quoth the Squire—that's France! and pray which is Spain? Now here it is pretty evident that the words France and Spain were both equivocal—each had two meanings, one the country so called, the other the positions of paper in the map of Europe or the world representing those countries, and that the good gentleman had started with the former, but was overtaken by the latter, that is, by the feeling that had been habitually associated with the image in the map and probably by some dim and imperfect relic of the image itself; but a moment's reflection will make it equally evident that the origin and proper cause of this blunder is to be sought for in the failure, irregular action, and faulty habit of the recollective, comparing, combining and concluding faculties, and above all in the habitual passiveness of the mind to the automatic trains of the memory and the fancy, the sequency of which is mechanically determined by accidental proximity of time and place in the original impressions (vide Friend Volume third page 138)[11] and that the words are merely the modes in which the errors in thought are conveyed and expressed, and that so far from being in the first instance causes of the confusion the preexistence of such confusion is the conditio sine qua non of their own existence as equivocations. Nor can we rest here for it is in the exposure and detection of these ambiguities that we have the best means of making men sensible of the faulty and relaxed state of their intellectual powers and functions. Not only in individual instances but to the enlightening of the public mind with and by the improvement of the general language,

[11] Cf. *The Friend* (1818), III, 138.

were I asked what the most effective means would be, I should answer as I have elsewhere already done,[12] a Dictionary constructed on the one only philosophical principle, which, regarding words as living growths, affects, and organs of the human soul, seeks to trace each historically through all the periods of its natural growth and accidental modifications—work worthy of a Royal and Imperial confederacy, and which would indeed hallow the Science! A work which executed from any one language, would yet be a benefaction to the world, and to the nation itself a source of immediate honor and ultimate weal beyond the power of victories to bestow, or the mines of Mexico to purchase. The realization of this scheme lies in the far distance, but in the mean time it cannot but beseem every individual competent to its furtherance to contribute a small portion of the materials for the future temple, from a polished column to a hewn stone, or a plank for the scaffolding; and as they come in, to erect with them sheds for the workmen, and temporary structures for present use. (II, 156-160.)

THE ART OF PERCEPTION

Does nature . . . present . . . objects to us without exciting any act on our part, does she present them under all circumstances perfect and as it were ready made? Such may be the notion of the most unthinking; for even with these it is too opposite to their own experience to be a distinct belief: but our readers need not be informed that there is a previous discipline of the senses, that even in the general functions of touch and taste and smell and sight and hearing we pass from our birth into a school beginning at the lowest forms and at our death we have not yet attained the highest. And as there is a seeing and hearing which belongs to all mankind, even so in the different kinds and species of knowledge there is a separate apprenticeship necessary for each. . . . In order to discuss aright the premises of any reasoning in distinction from the reasoning itself, a knowledge of the matter is the first and indispensable requisite. This may appear a truism, but tho' equally certain it is not equally obvious that the same necessity applies to the very means and acts with and by which we acquire the materials of knowledge—not only must we have some scheme or general outline of the object to which we could determine to direct our attention, were it only to have the power of recognizing it, or as the phrase is, to bring it under our cognizance when perceived; but the very senses by which we are to perceive will each again require the aid of a previous scientific insight—anatomi-

[12] Cf. *Biographia*, I, 241, note (Chap. XII).

cal, physiological and physical. Take for example the act of beholding. The instrumental agent of vision, viz. light with its laws and properties, gives birth to the science of optics; yet these laws cannot be safely applied without an acquaintance with the laws and properties of the atmosphere, together with the notion of vapors and their varying densities; and this again will be imperfect and insecure if the nature of translucence, transparence and of transparent and translucent bodies be not understood generally and the rule by which the phenomena are generalized grounded on some higher principle. Thus the several sciences of Hydrostatics, Æneology, Crystallology and Chemistry, preceded and accompanied by a knowledge of the pure Mathematics, may be all required in order to a legitimate judgment on a single phenomenon, i.e. before the image can be safely declared to possess objective reality—before it can be received with safety as a fact of experience. So erroneous would the assertion be, that an object of the sense is the same with the impression made on the senses, or even that what we appear to see is the same with the image formed on the retina, if it were possible to conceive an act of seeing wholly separate from the modification of the judgment and the analogies of previous experiences. Nor have we yet enumerated all the requisites. A delusion might result and in many cases necessarily would result if the knowledge supplied by Anatomy and Physiology were wanting, and even with these the source of error is not yet wholly closed. All inattention to the laws and rules—pure and empirical—of the imagination, volition and the feelings might occasion the beholder to mistake a product or disturbing force of his own being for the object which then only supports that name when it is contemplated free from all subjective influences.

We freely admit, or rather I have purposely introduced the preceding remarks for the purpose of announcing and impressing the truth, that in cases like those supplied in these remarks where the reasoning is grounded on some distinct external object, the business of common Logic is simple indeed, and that the application may be safely trusted to the common sense of mankind. For first the main end in investigations of this kind is most often the establishment of the object itself, which once established contains or rather is coincident with its inferences, and secondly, when this is not altogether the case, the sole logical exercise of the mind would be confined to the examination whether the second term was or was not included in the first, as the more comprehensive, or, which will more frequently occur, whether the application of the general rule is or is not legitimate. A power acting inversely as the square of the distance is the power of gravitation. But the law acts by a power, etc. Therefore

the law acts by a power of gravitation. We may now therefore readily understand the observations of Lord Bacon respecting the insignificance of common Logic and its utter inadequacy in the investigations of nature, and he might safely have added in those of the pure reason, but let it not be forgotten that the great philosopher at the same time asserts its utility, nay, its indispensableness, in all the moral and forensic concerns of life. But if we abstract all speculation and all discourse that fall under the class of moral, historical, and forensic, how small a portion shall we reserve for the majority of mankind. We need only reflect on the infrequency of any discussion in which the object is singly and directly presented to the sense or the senses.

For the purposes of ordinary observation the few and safe rules generalized from uninterrupted experience, aided with a few of the principal results obtained by scientific investigation and which are practically intelligible without any insight into the process by which they even originally obtained, will be sufficient to give us a justifiable confidence in that which alone we men have a social interest to ascertain—viz: the co-incidence of our individual perceptions with the average perceptions of our fellow creatures. Here indeed, plain and simple as these criteria are, spontaneously and almost instinctively as we apply them every hour of our lives, and simple as the rule pre-established in the logical canon—that in order to a conclusion we must assure ourselves that A has been rightly secluded and that B is actually included in A—yet the habit of repeating this process consciously and on all subjects of importance, above all and in all cases where the apparent conclusions of the understanding are at variance with our moral convictions or the persuasions of common sense . . . can be no other than that of a healthful dissatisfaction or premonitory discontent with whatever is vague or flitting. A mind so disciplined acquires not only a facility of recurring frequently to the sources and fountain heads of truth and there renewing the elasticity of reimpressing and sharpening the stamps of his intellectual being; but this process becomes a want, an habitual disideratum of his nature, the cause the more pleasurable because he progressively finds himself more and more amply remunerated both by the power which he acquires over others in anticipating the conclusions of minds formed in the same school with his own, and the delusions of others which he overlooks as one placed on an elevation in the centre of a labyrinth of paths not only sees his own future direction but can safely prophesy the entanglements and wanderings of the groundlings at every turn and in the whole detail of error. (II, 179-187.)

THE PLATONIC DIALECTIC[13]

When from two premises both of which are affirmed with equal right by the understanding, the understanding itself by legitimate deductions can arrive at two contradictory conclusions—the only possible solution of the difficulty is found in assuming that the understanding has been applying its own forms and functions or those which it has borrowed from the sense to objects which do not fall under its cognizance; as when for instance the understanding applies the forms of time and space, or quantity, quality and relation, to the Idea of the Supreme Being—or of things themselves contradistinguished from the phænomena. In these cases, I say, that the understanding is indirectly and by negation the Organ of the Reason and the exercise of Logic for this purpose by the understanding, to prove the inadequacy of the understanding, constitutes the Platonic Dialectic which the divine philosopher calls the wings by which philosophy first raises herself from the ground. (II, Opp. p. 191.)

"TRANSCENDENT" AND "TRANSCENDENTAL"

Transcendental knowledge is that by which we endeavor to climb above our experience into its sources by an analysis of our intellectual faculties, still however standing as it were on the shoulders of our experience, in order to reach at truths which are above experience; while transcendent philosophy would consist in the attempt to master a knowledge that is beyond our faculties—an attempt to grasp at objects beyond the reach of hand or eye or all the artificial aids and as it were prolongations of eye and hand—of objects therefore the existence of which, if they did exist, the human mind has no means of ascertaining, and therefore has not even the power of imagining or conceiving; that which the pretended sages pass off for such objects being merely images from the senses variously disjoined and recomposed, or mere words expressing classes of these images and by addition of other words associated with obscure feelings—a process pardonable in poetry tho' even there quickly degenerating into poetic commonplace, as, for instance, fountains of pleasure, rivers of joy, intelligential splendors and the like, but as little to be tolerated in the schools of philosophy as on the plain high road of common sense. (II, 208-209.)

[13] Cf. *Table Talk,* April 30, 1830.

PARENTHESIS ON KANT AS THE INVENTOR OF TRANSCENDENTAL ANALYSIS

. . . unless the honors of discovery can be justly or honestly withheld from the man who *first* saw and communicated the truths in their full extent and with systematic comprehension, under the pretence of a few scattered hints in some ancient or modern books the report and bearings of which were not even suspected by the writer himself. Such, however, is the destiny that with few or rare exceptions has attended on the works and products of original genius. At their first appearance, the new system is declared to be all jargon, a congeries of useless unintelligible phrases, either with no meaning or with a meaning that outrages common sense. (The Copernican System Sir Thomas Browne describes as a fit case for a *Mad Doctor*,[14] it being beneath the dignity of a philosopher to confute the whimsies of a man *out of his senses*, for how should a man believe in another's words who has given the lie to his own eye-sight?) An interval takes place during which the higher and better minds have mastered the new system, have recognized and proclaimed its value and importance—and their authority with the increasing number and respectability of the new school has made a sensible impression on the public opinion. And what follows! the doctrines are true indeed; but without any claim to originality, and in proof of these assertions the opinions of some former philosopher are wrested or wrenched into a co-incidence of meaning by critics who neither understand the one or the other; or who from long prejudice and the indurate habit of thinking in some one particular way are actually incapable of attaching any meaning to words representing truths that suppose and require a different direction of the intellective faculty, and who if able and inclined to learn at all, are too old and too indolent to learn when the effort of unlearning is an indispensable preliminary; or lastly, some one or two sentences which actually do *imply* the truths discovered by their contemporary, but the force, pregnancy, and involved consequences of which no man had ever seen, or perhaps could have seen previous to this (to the development of and expansion on a systematic form) are extracted from some obscure book or perhaps torn from their context in some well known books—and Harvey did not discover the circulation of the blood and Immanuel Kant stole the transcendental analysis and was not the founder of the Critical Philosophy. *But wisdom is justified by her children.* (II, Opp. pp. 210-214.)

[14] Cf. Browne's *Pseudodoxia,* Bk. I, Chap. V.

THE ECLIPSE OF PHILOSOPHY

Among the consequences of the overbalance of the commercial spirit, not from any excess of trade and commerce in themselves but from the decline or deficiency of the requisite checks and counterforces, and among these more especially (for our present purpose at least) from the gradual neglect of all the austerer studies; the long eclipse of philosophy, the transfer of that name to physical and psychological empyricism and the nonexistence of a learned philosophic class, constituting a publicum in publico, and to all which we may add . . . the aversion to theological controversy with the majority of well educated Englishmen and the revolution in the feelings and opinions of the public respecting the rank and value of polemic divinity . . . we have had frequent occasion to lament the vague and equivocal import of the terms and phrases which we are obliged to use in philosophic disquisition. . . .[15] (II, 212-13.)

LEIBNITZ AND CLARKE ON SPACE

Leibnitz was so far in the right that he denied the subsistence of space independent of the mind: but he grievously erred in representing it as nothing more than a confused perception arising out of the indistinctness of all particular figures, whether from the distance or the minuteness of the objects. Clarke and the English philosophers rightly and unanswerably replied to this that space was preconceived in order to these very confused perceptions. . . . They contended with truth that space was not abstracted from any object nor generalized from any class of objects: but they erred in the too hasty conclusion that therefore it must itself exist objectively. The truth is that it is the subjective condition of all objectivity, and whatever reality is attributed to outward experience must a fortiori belong to that without which no outward experience is possible. If therefore we use the term *real* in opposition to fantastic, or if we use *objective* as the contrary of accidental in order to distinguish from the results of individual particulars, then space is in this sense an undoubted reality, and eminently objective, but if we take the word *real* in opposition to mental; or *ob*jective in opposition to *sub*jective in its widest sense, then we must reverse the position. (II, 232-234.)

INTUITIONS IN SPACE

I cannot conclude this chapter without introducing one other at once the most beautiful and the most simple elucidation of this

[15] Cf. *Aids to Reflection,* Moral and Religious Aphorism XLIII, p. 119, and *Notes Theological,* pp. 129-130.

point; that which is presented to us in the well known Kaleidoscope, an instrument well calculated to suggest thoughts, the interest of which will long survive the innocent amusement to its powers of supplying which the instrument owed its popularity. We put into the instrument from 15 to 20 fragments, bits of coloured glass, a steel filing or two, ends of thread—cutting[s] of [t]wine, small pieces of silk, in short from 20 to 30 substances, and at every motion that we make there arises some new and distinct form of beauty in endless succession, the number inexhaustible and all beautiful tho' not all equally delightful. We find the same differences and the tastes of different persons differently affected, as if a series of beautiful *flowers* or *chef d'oeuvres* of jewelry were presented to the same person and to different persons. None could be denied to be beautiful, but we should hear the exclamations—How beautiful!—how very beautiful! This is pretty: but it does not strike me so much. This is the most beautiful of all that I have seen, etc. etc. For my readers' recollections will present the delights of a Kaleidoscope at its first introduction better than I can dramatize them. Let the 20 or 30 bits and fragments be removed from the Kaleidoscope to a dice box and try as long as your patience will permit to throw them or any portion of them on the table so as to form a beautiful figure—you will in all probability waste an hour—or a week—without succeeding in any single instance. The difference therefore in the former arrangements cannot arise out of the substances themselves but is attributable exclusively to the instrument or medium through which they were seen and in which their arrangement was affected. What shall we call this difference, this property I mean, common in kind to all the thousand successive figures presented to us? Evidently symmetry, and this subsists wholly in the instrument itself. In the constitution and constituent laws (or modes of action) of the Kaleidoscope itself this symmetry originates, and by these it is communicated not to the fragments themselves but to the figure in the beholder's mind resulting from this arrangement; and that they are all so arranged as to fall under one common form, viz: that of symmetry, is the work of the instrument itself. But further, the effect common to all, to what does it refer? Not to the sensibility considered as the capability of sensation. This indeed is affected, diversely affected, and it is its affections by which in great measure our preferences are determined and the greater comparative delight which we receive from one figure rather than from another—or from our selection of some substances rather than others; of bits of coloured glass, for instance, for common glass, or of the variety in colours rather than one or two kinds; and in some measure from the larger number of the substances

included, tho' here the action of the instrument itself is concerned in the effect. If not the sensibility therefore to the sense. Instead of the Kaleidoscope, the instrument of the sentious faculty, let us take the faculty itself as its own instrument, or an instrument of the mind—instrument at once and a constituent part. In like manner for symmetry or peculiar modifications of the relations of space, we will take space itself, and we may then apply the results without change. All intuitions of objects outwardly present have their origin both in the sensibility and in the sense. As far as the sensibility is affected we are justified in resolving this effect into an agency and proper character of the *object*, modified, however, by the nature of the sensibility which it modifies. All else must be referred to the senses, with this exception however—if indeed it is an exception and not included in the former class. . . . I mean the contingency of the determinate forms or the fact that the universal form (that of space in the present instance of the faculty, and that of symmetry in the presentations of the Kaleidoscope) are such at the moment, as far as it is not referable to an act of our own will, whether the external object be external in the ordinary use of the term, or the spontaneous act of our own organization as in our dreams. (II, 240-244.)

HUME, BACON, BEDDOES

Were it not as it is of highest importance from the moral interest of the question it would be indispensable in order to the establishment of [a] logical criterion, by which the true nature of the premises may be distinguished, and rules of undoubted legitimacy in forensic reasoning (when what is subjectively true is likewise practically valid) be prevented from being applied as principles to the determination of objective truth in real Science and Natural Philosophy—in order to this end I say (which among all the works of modern Philosophy Bacon's Novum Organum has the immortal merit of having first fully and worthily set forth) it is indispensable that this last point should be seen with the greatest possible clearness and distinctness. The student must be made to understand, that not the relation of cause and effect applied to certain antecedents and consequents in nature in and for itself was the object of Hume's scepticism. What Hume doubted was the *necessity* of the connection between A and any given B not included in A, as a necessity of reason and insight. . . . But did Mr. Hume deny the cogency, the apodictive necessity, of the Mathematics, or did he let the late ingenious but somewhat over-hasty Dr. Beddoes[16] gravely derive the evidence

[16] Cf. *Theory of Life*, pp. 23-24.

of the elements of Geometry by Euclid from the very same source and place it on the same scale with the elements of Chemistry by Lavoisier . . . ? No, . . . He neither denied the evidence of the Mathematics nor doubted the necessary conclusions of common Logic. (II, 302-305.)

HUME AND HIS OPPONENTS

I trust that I feel in myself as little disposition to be influenced by, and as strong an inclination to repel, Mr. Hume's attacks on the principles of Religion and Morality, as the most vehement of his antagonists: and to such an *exposure* of the fallacy of his *conclusions* by a fair *exposition* of the assertions on which they are grounded, as the Archbishop of Dublin (Dr. Magee) has given in his work on Redemption, I have payed my full tribute of applause. But I can not bring myself to believe, that David Hume was either more deficient in common sense, or more likely to render himself ridiculous by outraging its dictates, than Messrs. Reid, Oswald, Beattie, or any other of his contemporary opponents on either side of the Tweed. Nay, I am almost tempted to whisper my suspicion, that he understood the nature and value of historical testimony quite as well as Dr. Priestley himself. (II, Opp. pp. 305-306.)

KANT

. . . a Prussian Philosopher, who in earliest manhood had already distinguished himself not only as a profound Mathematician by the treatise on the dead and living forces and as a Natural Philosopher and Astronomer by his prophetic system of the heavens, the germ and original Idea of Laplace's *Céleste Mécanique,* and in which the existence and place of the Georgian Sidus, of the small extra-zodiacal planets, the duplicity of Saturn's ring etc. were predetermined from the theory long before either had been discovered by observation; but by the singular dissatisfaction with the existing state of metaphysics, the author declaring himself equally at variance with those who boldly asserted the negative as with those who took for granted the affirmative of the question, Is such a science as that of Metaphysics possible and is it already in existence? Before his acquaintance with the writings of Berkeley, he appears to have convinced himself that the Epicureans and Sceptics had a great deal more logic on their side than the zeal of the religious party was willing to admit, and that the orthodox had a great deal more truth at the bottom of their opinions, than the contemptuous spirit of the Sceptics and Matter-of-fact men could bring itself to discover. (II, 309-310 and Opp.)

THE DISTINCTION BETWEEN ANALYTIC AND SYNTHETIC JUDGMENTS

Is this nothing of small value? Does it form no part of that knowledge that ought most to interest us, if our great Moral Poet have truly said that

The proper study of Mankind is Man?

Is it not included in the heaven descended precept γνῶθι σεαυτόν? As the critical inquisition into the constitution of the intellectual faculties is the proper sphere in which this finds its use and validity it cannot surprise us that it is scarcely noticed by Logicians and Metaphysicians previously to the appearance of the Critique on the Pure Reason, which in fact would have been open to fewer objections, had it been proposed by the author under the more appropriate name of Transcendental Logic. For considered as *Logic* it is irrefragable: as philosophy it will be exempt from opposition and cease to be questionable only when the Soul of Aristotle shall have become one with the Soul of Plato, when the Men of *Talent* shall have all passed into Men of *Genius* or the Men of Genius have all sunk into Men of Talent. That is, Græcis Calendis or when two Fridays meet. (II, 329-330.)

IMAGERY, EVIDENCE, AND CERTAINTY

What the use of the picture is in aid of the evidence, and how little it is essential to the certainty of the intuition, we may find in going through any arithmetical operation. That $3 \times 3 = 9$ and $3 \times 9 = 27$ we determine in the first instance by the law of succession in ourselves, that is, by the intuition of time, and this is sufficient for certainty as long as we can attend to the progression with the recollection of what went before, or some mark representative of the same and a substitute for the recollection more secure than the recollection itself, the names I mean of each unit expressing and involving all that in the line of time had gone before; but yet in order to extend and facilitate the construction and for the purpose of increased evidence we express the intuitions of Time by those of Space. A 9 we call the square and 27 the cube of 3; but which no more alters the nature of the former process or prevents it from being constructed intuitively, that is, a truth immediately grounded in the form and constructive power of the inner sense itself, than the notes of music cease to be auditual and successive by being entitled sharps and flats. The student if acquainted with fluxions and the processes of integration and of differentials will find the happiest and

most perfect exemplification of the relations which the two forms of the outer and inner sense, that is, of Space and Time, are capable of bearing to each other. We reason algebraically and above all infinitessimally in order to give rapidity and sense of difference to our reasoning, and we translate it, where it is practicable, geometrically, that is, into the intuitions of Space, in order to give it totality and greater evidence. (II, 364-365.)

TRICHOTOMY

The singular circumstance of this three-fold division or Trichotomy obtaining throughout the analysis of the mind, and which the founder of the Critical Philosophy contents himself with noticing as being singular and worthy of notice, and which he supposes himself to have noticed first, may be found in a much earlier writer, our own celebrated Richard Baxter. Any attempt to explain it would be out of its place in the present disquisition. It is a primary datum of the understanding, the *way in which* we reflect, proved to us by our pure *products* of reflection . . . ; but not to be explained by them. Its purpose is to *account for* the results of reflection and it would be preposterous to expect that these should account for it. Briefly, in common Logic the fact has no interest; in Transcendental Logic it is a necessary element, but its explanation belongs to neither as transcending the faculty of which the one gives the results and the other the analysis.

It is no more than common justice to this acute and if too often prejudiced yet always sincere, pious, and single-hearted Divine to say, that he saw far more deeply into the grounds, nature and necessity of this division as a Norma Philosophiæ and the evils and inconveniences of the ordinary Dichotomy when carried from its proper province, that of common Logic, into Philosophy and Divinity, than Kant did more than ——— century after. The sacred fire however remained hid under the bushel of our good countryman's ample folios. (II, Opp. pp. 401-402.)

WORDS AND IMAGES

In disciplining the mind one of the first rules should be, to lose no opportunity of tracing words to their origin; one good consequence of which will be, that he will be able to use the *language* of sight without being enslaved by its affections. He will at least secure himself from the delusive notion, that what is not *imageable* is likewise not *conceivable*. To emancipate the mind from the despotism of the eye is the first step towards its emancipation from the influences and

intrusions of the senses, sensations and passions generally. Thus most effectually is the power of abstraction to be called forth, strengthened and familiarized, and it is this power of abstraction that chiefly distinguishes the human understanding from that of the higher animals—and in the different degrees in which this power is developed, the superiority of man over man mainly consists. Hence we are to account for the preference which the divine Plato gives to expressions taken from the objects of the ear, as terms of Music and Harmony, and in part at least for the numerical symbols, in which Pythagoras clothed his philosophy.

On this principle I do not object to the extension of the term, Image (or *Idea* in Hume's usage) from the *re*-presentations of the sight to the analogous relics of the other senses—and if other reasons had not induced me to reject the *Humian* terminology of *Impressions* and *Ideas,* the same concession would have been made to the phrase Auditual and Tactual *Ideas*—a phrase, the use of which by one of our greatest living Philosophers, then in the early morning of his manhood, and his fame only beginning to dawn did, as I well remember, give occasion of surprise and scandal to a veteran metaphysician in my presence. (II, 403-404.)

FROM THE "OPUS MAXIMUM"[17]

THE CHILD'S ARITHMETIC

In the child's mind there is nothing fragmentary; its numeration-table is truly Pythagorean. The numbers are, each and all, units and integers, and slowly and difficultly does it exchange this its first awakened arithmetic for that of aggregation, apposition, in one word of *result*. . . . (MS B 3.)

THE NATIONAL SCHOOLS

Has not our recent experience, and an experience too on the most unquestionable proofs, I mean the national schools, consisting of children collected promiscuously from the houses of the poor and ignorant, children therefore already more or less contaminated by the habits and examples of their elders—has it not I say given practical proof that to the social well-doing of human beings the three most effectual means are: the removal of temptation, the maximum of watchfulness, and the minimum of punishment in all its forms, bodily or imaginative? (MS B 3.)

[17] MSS B2 and B3. The pages of these MSS are unnumbered.

ATOMISM AND PHILOSOPHY

I do not see, I confess, by what exclusive right, a scheme, which commences with the assumption of *atoms,* can claim for itself exclusively or eminently the epithet of experimental, nor in truth by what right such a scheme can be appropriately called a philosophy. At least I am unable to discover any other essential distinction between Philology, in its most extensive sense as comprehending the objects and the processes of speculation, and Philosophy, but that the latter term supposes the will and therefore the whole man collectively, while the former excludes the will and refers only to a part of our nature, namely the human intelligence. That only which unites the speculative and the practical, subordinating the former to the latter, can be rightfully called a Philosophy. (MS B 3.)

GRAMMAR AND LOGIC

In fact the science of grammar is but logic in its first exemplification or rather in its first product, λόγος, discursus, discourse, meaning either, i.e., thoughts in connexion or connected language, and the primary distinction of identity and alterity, of essence and form, of act and being, constituting the ground-work and as it were the metaphysical contents and pure conditions of logic. Not so properly therefore can the truths of which we have been discoursing be said to borrow an illustration from the forms of grammar or the rules of logic, as that these derive at once their possibility and their import from those primary truths which as they are the being of all beings ens entium, so are they the form of all forms, ideæ idearum. (MS B 3.)

SCIENTIFIC ASSUMPTIONS

In every science something is assumed the proof of which is prior to the science itself, whether supplied by some other science or consisting of some fact the certainty or validity of which is of common acknowledgement, or lastly of some Idea or conception, without which the science itself would be impossible and the denial of which implies the logical falsity of the whole and consequently stamps the very act of commencing it in detail with the character of absurdity. (MS B 2.)

DICHOTOMY

I have shewn in another work, . . . that* Dichotomy, or the primary Division of the ground into Contraries, is the necessary form

* I had not then known of, nor have I now seen, Richard Baxter's *Methodus Theologiæ;* but from the following sentence in his Life . . . I cannot doubt,

of reasoning, as long as and wherever the intelligential faculty of Man weens to possess within itself the center of its own System; and vice versa, that the adoption of Dichotomy under the supposition of its being the legitimate and only form of distributive Logic, naturally excites, and seems to sanction this delusive conceit of Self-sufficiency in minds disposed to follow the clue of argument at all hazards, and whithersoever it threatens to lead them, if only they remain assured that the thread continues entire. And it is now my purpose to evince, that the inevitable result of all *consequent* reasoning, in which the speculative intellect refuses to acknowledge a higher or deeper ground than it can itself supply, is—and from Zeno the Eleatic to Spinoza ever has been—Pantheism, under one or other of its modes: . . . (MS B 3.)

ON PROVING THE EXISTENCE OF MAN'S WILL

Direct proof indeed is impossible, but indirect proofs, arguments from extreme improbability, and motives of strongest inducement to the reconsideration of the point denied may be brought forward. It is possible that the denegant may not be aware of all that is implied or of necessity to be deduced from the position contained in his denial: and it is likewise probable, and a probability of much greater practical interest, that the generality of those who at once and with all the confidence of habit had granted the postulate and acknowledged the assumption may labour under the same imperfection, the same lack of distinct insight into the contents and full meaning of their own concession. To correct this defect, to mature this general assent into distinct conceptions, and by means of these to bring a consistency of thought and language in all other important concep-

but that the merit of substituting Trichotomy for the then, and alas! the still prevailing Method of Dichotomy, which forms the prominent excellence in Kant's Critique of the Pure Reason, belongs to R. Baxter, a century before the publication of Kant's work. Nay, it appears that the claim of our Countryman rests on a stronger as well as elder plea. For Baxter *grounds* the necessity of Trichotomy, as the Principle of Real Logic, on an absolute Idea presupposed in all intelligential Acts: whereas Kant adopts it merely as a fact of Reflection, tho' doubtless as a singular and curious Fact in which he suspects some yet deeper Truth latent and hereafter to be discovered. The passage: "Having long been purposing to draw up a Method of Theology, I now began it. I never yet saw a scheme, or Method either of Physics or Theology that gave any satisfaction to my Reason. Tho' many have attempted to exercise more accurateness in distribution than all others that went before them, yet I could never see any whose Confusion or great Defects I could not easily discover; but not so easily amend. *I had been twenty six years convinced that Dichotomizing will not do it;* but that the Divine Trinity in Unity hath exprest itself in the whole frame of Nature and Morality." Baxter's Life Part 3: p. 69.

tions included in the same class, truly or falsely, and in the latter instance for the purpose of transferring them to their proper department or birthplace—this was the object and this forms the contents of the following chapters. . . . (MS B 2.)

MECHANISM

The scheme of pure mechanism, which under all disguises, tempting or repulsive, christian or infidel, forms the ground-work of these systems of modern moral and political philosophy, political economy, and education, which begins by manufacturing mind out of sense and sense out of sensation, which reduces all form to shape, and all shape to impression from without, leads, we have seen, to its own confutation, and scorpion-like destroys itself while the tail, turning round in its torture, infixes the poisoned sting in its head—inevitably leads to it, I say, if only it be forced by a stern logic into all its consequences. And well were it, perhaps, that this circuit should be taken and the conviction of the truth be at once strengthened and inspirited by a knowledge of the contrary. But alas! how seldom is this the case! In the far greater number of instances the pupil goes but half way, pursues the line of declination far enough to lose sight of the true road, and yet not so far as to be aware of the whirlpool in the outward eddy of which he is wheeling round and round. The influence of the laws of his country, the acquired nature which comes to every individual born into a state of civilization, custom, habit, imitation, the necessity of preserving character, the sympathies and supports derived from superior rank and fortune, the consequent absence of temptation, to all which, add in this country at least the pressure of our ranks on each other up the whole ascent of the social ladder, with the reserve and watchfulness of demeanour produced from this cause in the higher ranks, and the emulation and even the mimicry awakened in the subordinate classes;—add the extent and systematic movements of trade and the interdependence of every species of property (and in this age what is not property?—all things and all powers, nay the very passions, prejudices, and vices of mankind are modes of property or the raw materials out of which it is formed; nay the man values himself chiefly as a part in the machine), and lastly the evidentness of the fact that in such a state of things every deviation from outward integrity must find its speedy if not immediate punishment from its mere commercial effect as obstruction and irregularity, so that ere the profit have been received the heavier loss is nigh at hand, and with all these conjoin the almost continual preaching of moral prudence, i.e., of morals on merely prudential motives—and we see at once how easily a man may pass through life

without a single principle, and never feel the want of it from the multitude and variety of its substitutes and its counterfeits. (MS B 3.)

THE FORMAL SCIENCES AND THE PLATONIC DIALECTIC

No man who has convinced himself . . . no man, who in the terms *eternity* and *omnipresence* means more than indefinite time by the one and indefinite diffusion by the other, but must have felt the difficulty of choosing words the least likely to bewilder the judgment of his auditor by the intrusive associations of habitual fancy. To this difficulty and the desire of overcoming it we must attribute the numerical language of the Pythagoreans, and the frequency of musical and geometrical terms in the works of Plato and the Platonists. In the same service geometry itself was enjoined as the first purification of the mind, the first step towards its emancipation from the despotism and disturbing forces of the senses. To the same end and as an ulterior measure tended the discipline of the discursive faculty by the common logic in order that the pupil by a precise and intimate acquaintance with the proper powers and forms of the finite or individual understanding might be prepared for the dialectic so highly and mysteriously extolled by Plato as the very wings of philosophy by which we ascend from the conditional to the absolute, from the subjective forms of humanity and the correspondent objects dependent thereon, each being that which it is not by any inherent propriety, but in consequence of the position of the other as its opposite—ascend, I say, from these to the permanent, the original and ever originating, to that which is neither object nor subject because it is the root and identity of both. If we examine in what this dialectic consisted, as in the Parmenides of Plato, and here and there through the greater number of the Platonic Dialogues, we shall find that it consisted in taking two positions each undeniable as the premises, undeniable I mean according to the principles of the understanding, on the presumption that in the understanding, the senses and the knowledges obtained by experience and reflexion, all the grounds of truth, cognizable by the human being, are contained. From each premise the reasoner arrives and forces his antagonist to follow him by the most legitimate deductions to an inevitable conclusion. In both trains the premises are granted, the deductions are faultless, unclouded by a suspicion of sophistry, and as we have before said the conclusion inevitable, and yet they are in direct and exclusive contradiction to each other. The inference is evident, though Plato commonly leaves it to his reader's own reflection, namely, either that all reasoning is a mere illusion and that the simple noticing and

recording of phenomena with the art of arranging the same for the purposes of more easy recollection constitutes the whole of human knowledge and the sole legitimate object of the human intellect, or there must exist a class of truths to which the measures of time and space and the forms of quantity, quality and contingent relation are not applicable, and that hence the contradictions before mentioned were the natural and necessary result of the misapplication of an organ to an object. (MS B 3.)

SYNONYMS

. . . Here it may be permitted us to observe in general that words truly synonymous, i.e. having precisely the same definition, as they cannot exist in an original and homogeneous language except through the degeneracy of the nation whose language it is, . . . so are they defects in the language of mixt origin.

Defects we say as long as the words remain synonymous; though as ready-made materials of future appropriation, when in the progress of intellectual development new distinctions are brought into consciousness, they may be regarded as the reversionary wealth of a language. But while they remain they are not merely excrescences, but those in which all the bad humours lurk and obtain a semblance of organization. (MS B 2.)

MOTIVES

For what is a Motive? Not a thing, but the thought of a thing. But as all thoughts are not motives, in order to specify the class of thoughts we must add the predicate, "determining" and a motive must be defined a determining thought. But again, what is a Thought?—Is this a thing or an individual? What are its circumscriptions, what the interspaces between it and another? Where does it begin? Where does it end?—Far more readily could we apply these questions to an ocean billow, or the drops of water which we may imagine as the component integers of the ocean. As by a billow we mean no more than a particular movement of the sea, so neither by a thought can we mean more than the mind thinking in some one direction. Consequently a motive is neither more nor less than the act of an intelligent being determining itself, and the very watchword of the necessitarian is found to be in fact at once an assertion and a definition of free agency, i.e., the power of an intelligent being to determine its own agency. . . .

It is not the motives govern the man but it is the man that makes the motives: and these indeed are so various, mutable and chame-

leon-like that it is often as difficult as fortunately it is a matter of comparative indifference, to determine what a man's motive is for this or that particular action. A wise man will rather enquire what the person's general objects are—What does he habitually wish?—thence deducing the state of the will and the impulses, in which that state reveals itself and which are commonly the true efficient causes of human actions: inasmuch as without these the motive itself could not have become a *motive*. . . .[18] (MS B 2.)

THE DISCOVERY OF TRUTH

There is one point on which we are particularly anxious to prevent any misunderstanding. This respects the difference between the two possible assertions, "Such a truth may be known as truth by the light of reason" and "The same truth was discovered or might have been discovered by men by means of their reason exclusively." We may assert the former and in the course of this work shall find occasion to assert it without involving, nay we altogether disbelieve and deny, the latter. The facits or sum totals affixed to the examples in the common elementary school-books of arithmetic are all capable of being demonstrated by the science of arithmetic and yet it is very possible that the children never attain to that scientific insight without those and similar helps and assistances. To take another instance, which may bring us still nearer to the point in question. An object may be placed at so great a distance, or so dense an atmosphere may intervene, as to render it in the highest degree improbable that it could ever be noticed by persons placed at the given point under the supposed impediment of distance and misty air, which yet may become recognisable without much difficulty by the naked eye after it had been once pointed out and accurately described by others familiar with the object, or seen by means of a telescope. Instances in which a knowledge given to the mind quickens and invigorates the faculties by which such knowledge is attainable independently cannot have escaped the most ordinary observer, and this is equally true whether it be faculties of the mind or of the senses. Who has not experienced the help which a good county map affords to a traveller in a country where, as in Wales for instance, the names of places, villages etc. are relics of a language unknown to him? It is indeed wonderful both how small a likeness will suffice a full apprehension of sound or sight when the correspondent sound or object is foreknown and foreimagined and how small a deviation or imperfection

[18] The passage continues with a nearly *verbatim* rendering of the paragraphs on "Motive and Impulses" published in the "Omniana" (*Literary Remains*, I, 297-299).

will render the whole confused and indistinguishable or mistaken where no such previous intimation has been received. Hence all unknown languages appear to a foreigner to be spoken by the natives with extreme rapidity and to those who are but beginning to understand it with a distressing indistinction. . . . What the impregnating power is to the egg or germen, what soil, heat and moisture are to the seed or egg so fecundated, that is example, the presentation of a something to be imitated and repeated, for the human faculties. . . . If we may use so humble an illustration, as certain pumps will flow only when a portion of water has been previously thrown in, so in order to all the products of the mind a similar product must be presented as the inceptive or fermenting principle of the process by which the product may be after knowingly and regularly obtained. When Euclid or Pythagoras promised his pupils or followers to teach them to construct the circle and to deduce its astonishing properties independently of all outward experience, he neither denied nor meant to deny that the very words in which he expressed his promise might have conveyed neither meaning nor inducement but for the empirical necessities, discoveries and technical inventions occasioned by the overflowing of the Nile. In like manner when we affirm of any moral or religious truth that it is susceptible of rational or philosophical demonstration, we are so far from implying that the knowledge of its truth had its primary origin in the unaided efforts of human reason that we regard the present existence and actual exercise of such a power as the result of a revelation which had by enlightening the mind roused, disciplined and invigorated all its faculties, and we appeal to experience and history for the confirmation of the fact. Whether we direct our historical researches to Egypt, to India, or to the earliest scientific schools of Greece, there where the sciences are we find either claims to a revealed religion or traditions of the same: and in the religions themselves for which the claims are made, the farther back we are enabled to trace its existence the more simple do its creed and forms become, the more clearly do they discover themselves to be the relics of a religion having every claim to the character of revelation that internal evidence and congruity with the philosophic idea of God and the nature and needs of man can supply. (MS B 2.)

PROBABILITY AS EVIDENCE

The probability of an event is a part of its historical evidence and constitutes its proof presumptive or evidence a priori: and the degree of evidence a posteriori requisite to the satisfactory conviction of the actual occurence of an event stands in an inverse ratio to the strength

or weakness of the evidence a priori. Nay, there are conceivable cases in which the proof presumptive or the anterior probability may be so strong that the mere circumstance of its having been asserted by any respectable man or believed by any number of men shall suffice for the proof of its actual occurrence. (MS B 2.)

FROM AN AUTOGRAPH NOTEBOOK[19]

SYLLOGISTIC LOGIC

I consider the Syllogistic Logic as essentially empirical[20] in respect of it's Preconcepta et Presuppositа—i.e. that it takes for granted the facts of Unity and Multeity, Singular and Plural, no less than the principles of Identity and Alterity. (P. 18.)

IDEAS[21]

Let me by all the labors of my life have answered but one end, if I shall have only succeeded in establishing the diversity of Reason and Understanding, and the distinction between the *Light* of Reason in the Understanding, viz, the absolute Principle presumed in all Logic and the condition under which alone we draw universal and necessary Conclusion from contingent and particular facts, and the Reason itself, as the source and birth-place of *Ideas,* and therefore in its conversion to the Will the power of *Ultimate* Ends, of which Ideas only can be the subjects; and if I shall have thus taught* as many as have in themselves the conditions of learning the true import and legitimate use of the term, Idea, and directed the nobler and loftier minds of the rising Generation to the incalculable *Value* of Ideas (and therefore of Philosophy which is but another name for the manifestation and application of Ideas) in *all* departments of Knowlege, not merely technical and mechanic, and their indispensable presence in the Sciences that have a worth as well as a Value to the Naturalist no less than to the Theologian, to the Statesman no less than to the Moralist—in Philology, in Organology, in Psychology, as *subjective,* and in physiological Anatomy as *Objective,* Analytique, in Chemistry as the constructive Science de Mini-

* Negatively—i.e. what is not an Idea, and what the term, Idea, does *not* mean, for *all* who have sufficient power of Thought to ask the question; but positively for those to whom it is given, as the *occasion* of their turning themselves toward the East.

[19] MS C.

[20] Cf. *Biographia* (1847), I, Appendix, p. 317.

[21] Cf. Appendix E to the *Statesman's Manual* and *Works passim.*

mis and Astronomy as the correspondent Science de Maximis I shall have deserved the Character which the fervid Regard of my friend, Irving, has claimed for me, and fulfilled the high Calling which he invokes me to believe myself to have received.

. . . And yet, far often and by more persons than I find it pleasure to remember, and these too professed Metaphysicians, Disciples some of the Anglo-Gallic School [of] Locke, Hume and Condillac, some of the Scotch School of Reid and Dugald Stewart, I have had questions put to me, which could be no otherwise understood than as a request that I should give them an *Idea* of an Idea. They would laugh at the man who should ask them for the Image of a Flavor or the odour of a Strain of Music—and to ask for the *Conception* of an Idea, is, if possible, yet more irrational—What meaning I attached to the *word,* Idea, I had already declared. The *term,* Idea, I had already defined, in the only way, in which the name of *any what,* that really or actually is, can be defined—viz, first, negatively, by contra-distinction—i.e. by determining what an Idea is *not*—2. positively, by some character common to all Ideas—ex gr. that in all we contemplate the Particular in the Universal, or the Universal in the Particular, the Qualified (or determinate) in the Absolute, and the Absolute in the Qualified. This, however, is not *the* Idea—which is *the* Form, in which the Absolute distinctly yet entirely and indivisibly is realized and revealed. This is that which cannot be *generalized,* on which the mind can exercise no modifying functions—that which can only be *contemplated*—that which is deeper than all intelligence, inasmuch as it represents the element of the Will, and it's essential inderivability. Thirdly by referring to some Instance—as to the *Ideas* of Kepler, the Correlates of the Law of the Planetary Orbits contrasted with the conceptions of Ptolemy—who began with the phænomena, the apparent Motions, as *data*—and then sought so to take them as that he might take them all together—i.e. *concipere capere* hæc *cum* illis—and the Conception or synopsis of a plurality of phænomena so schematized as to shew the compatibility of their co-existence, is Theory—a product of the Understanding in the absence or eclipse of Ideas, or Contemplations of the Law, and hence necessarily conditioned by the Appearances, and changing with every new or newly-discovered Phænomenon, which Theory always follows never leads—while the Law being constitutive of the phænomena and in order of Thought necessarily antecedent, the Idea as the Correlative and mental Counterpart of the Law, is necessarily prophetic and constructive—et Solem dicere falsum Audet, and turns the contradiction of the Senses into proofs and confirmations of it's Truths—But take any fact, which the senses do not present and

which the Fancy cannot resolve in a series of images, or any position of Physiology which the Senses contradict or refuse to recognize—and see whether the Understanding can go a step further—whether our conception is not equally defective or oppugnant as our perceptions! Take for instance the fact of Chemical Combination as contradistinguished from mechanical juxtaposition, Chalk and Sulphur Acid from Magnesia and Water—or the Penetration of Substances, the facts of Secretion and Absorption—and try whether the Atomic Theory—if the hypothetical atoms are assumed as real entities and not as the +, — &c. in Algebra, for the purposes of calculation—will help you to conceive the first and whether what is by misuse of Language called conceiving does not consist in referring the fact to *Ideas,* of numbers representing powers essentially united with proportions, dynamic ratios, ratios not of powers, but ratios that are powers, *ἀριθμοὶ πυθαγοραιοί*, Numeri numerantes. Try whether the doctrine of Pores will enable you to conceive the latter—or rather whether they are themselves utterly inconceivable by virtue of their absurdity, as the Ideas are inconceivable by their transcendency to Conceptions, both equi-distant from the Understanding, the one below, the other above it. How then can you require me to furnish you with a conception of an Idea, when its inconceivability is an essential character of an Idea, and at least a negative Test?

. . . Whatever be the Object of Pursuit, physical, physiological, moral or theological, the Man who employs his understanding exclusively, is at the highest but a Lexicographer—and few indeed are they whose Understandings are sufficiently capacious, and their Reading sufficiently extensive to rank them with the [Constantines?] Stephani, and Ainsworths.—The greater number are but Index-makers of this or that Volume—I contrast with this class the Dialectician in the Platonic sense of the word—who uses his understanding for the wording of Truths known in a higher light—as an auxiliary—a go-cart of the infant Reason. . . . (Pp. 33-38.)

HISTORY[22]

The directing Idea of History is to weave a Chain of Necessity the particular Links in which are free acts—or—to present that which is necessary, as a Whole, consistently with the moral freedom of each particular act—or—to exhibit the moral necessity of the Whole in the freedom of the Components—the resulting chain as necessary, each particular Link remaining free. The old Chroniclers and Annalists satisfy the latter half of the Requisition—and

[22] Cf. *Table Talk,* September 12, 1831.

[Hume?], Robertson, and Gibbon the former half. In Herodotus and Thucydides alone both are found united. (Pp. 39-40.)

LANGUAGE

A man of Genius using a rich and expressive Language (the Greek, German, or English) is an excellent instance and illustration of the ever individualizing process and dynamic Being, of Ideas. What a magnificent History of acts of individual minds, sanctioned by the collective Mind of the Country a Language is—This Hint well deserves to be evolved and expanded in a more auspicious moment. Q^{y} whether words as the already organized Materials of the higher Organic Life . . . may not after a given period, become *effete?* How rightly shall we conceive this marvellous Result—a Language?—A chaos grinding itself into compatibility! But this would give only the Negative attributes. (P. 47.)

READING

Mem. In reading a work, especially if critical, controversial, or historical, to notice what the Writer evidently takes for granted throughout, tho' perhaps he has no where expressed it. Exempli gratiâ—in Eichhorn's Introduction to the New Testament the persuasion—that is not the word—but such a habit of thinking so and so, that the person does not *think* at all, as if it were like common air which every man breathes and no more thinks about—of the *measureless* intellectual inferiority of the Jews to the Greeks and Romans—at the commencement of the Christian era—not the inferiority of the Jewish Literati to the Gentile Philosophers, but of the Jewish People to the Gentile Commonalty. Should this be as I believe it to be, a mere prejudice Seculi Voltairiani, how large a part of Eichhorn's System would fall to the ground. (An unnumbered page.)

APPENDIX A

THE BRISTOL NOTEBOOK

IN addition to the manuscript printed above (pp. 53-66) the Bristol Notebook contains the following fragments and jottings:

I. *Autograph excerpt from* Don Quixote, *pasted loosely on the inside of the front cover.* (*Cf. Bk. III, Chap. LI.*)

understand it fully, and who knows but I may chance to hit the nail on the head?" The interrogator having repeated his story again and again, Sancho said, "I think I can now explain the case in the twinkling of two balls; and this it is: A Man swears he is going to be hanged upon such and such a gibbet; if he actually suffers before that gibbet he swore the truth, and by the enacted law ought to be allowed freely to pass the bridge; but if he is not hanged, he swore false and for that reason ought to suffer upon the gibbet."

II. *List of books, apparently copied from some alphabetized catalogue; inside of back cover, volume inverted.*

Athanasii Opera
Baxter's Works (Richard Baxter, 1615-91.)
Bolton's Works (Probably Robert Bolton, 1572-1631.)
Cudworth on Morality (Ralph Cudworth. *A Treatise Concerning Eternal and Immutable Morality.* 1731.)
Cumberland's Law of Nature (Richard Cumberland. *A Brief Disquisition on the Law of Nature.* 1692. Tr. and abridged from *De Legibus Naturae,* 1672.)
Jonathan Edwards' Works
Firmin's real Christian (Giles Firmin. *The Real Christian.* 1670.)
Charnock's Works (Probably Stephen Charnock, 1628-80.)
Howe's Works (Probably John Howe, 1630-1705.)
Hale's Primitive Origination (Matthew Hale. *The Primitive Origination of Mankind,* 1677.)
King on the origin of Evil (William King. *De Origine Mali.* 1702; Eng. tr. 1731.)
Manton on the Lord's Supper (Thomas Manton. Probably *A Practical Exposition of the Lord's Prayer.* 1684.)
Owen's Works (Probably John Owen, 1580-1651.)
Reynolds' Works (Probably John Reynolds, 1667-1727.)
Nathaniel Taylor's Works (1662?-1702.)

Costard's Astronomy (George Costard. *The History of Astronomy.* 1767.)

Costard's Letters on Astronomy (Letters published 1746 and 1748)

Excerptum totius Italicæ Literaturæ, folio (Ed. Societas literaria Berensis, 16, tom. 1758-62.)

Fabricii opera omnia (Probably Johann Albert Fabricius, German classicist and bibliographer, 1668-1736.)

Plutarch's Opera

Michaelis Annotations in libros Hagiographos (Johann Heinrich Michaelis. *Uberiores annotationes philologico-exegeticæ in Hagiographos Vet. Testamenti libros.* 1720.)

III. *Directions for stropping a razor. Autograph, first page from the back, volume inverted.*

First, clear the Hone with sponge, soap and water—wipe it dry—then dip the soap in clear, soft water; wet the Hone likewise, and rub the soap lightly over it, till a thin pellicle covers the surface—then set the Knife or Razor as usual, keeping the soap sufficiently moist, and if necessary adding a little more soap and water from time to time. Strop the Razor after Setting, and before it is put by—and Sponge the Hone.—

Paste or Powder for Razor Strop.

Superior to Emery . . Specular Oligiste Iron, or Crystallized Hydroxide of Iron—artificial substitute of equal powers. Sulphate of Iron and Common Salt, equal parts. Rub them well together and heat the mixture to redness in a crucible. When the Vapors have ceased to rise, let the Mass cool—Then wash it to remove the Salt, and when diffused in water, collect the brilliant nitraceous scales which first subside. These spread* on leather soften the edge of a Razor and make it cut perfectly.

*Query. with any Lard or the like?

IV. *Fragment of a Discussion of Syllogistic Reasoning, prefacing the History of Logic* (pp. 1-17.)

Must not therefore the whole Idea of the superior Genus be involved in the inferior and this again in the individual thing? No doubt. But does the converse of this hold good, does the Idea of the Individual exist entire in the Species? The Idea of the Species entire in the Genus? In short, is the Particular Idea completely implied in the Generic? No, for in the Generic there are wanting many particularities of the Individual and it is indeed formed by

leaving these out. You see then that you cannot conclude from the Particular to the Universal, but that you must always conclude from the Universal to the Particular. You cannot say, Since every square has right angles, therefore every four-sided figure has right angles, but we may with truth conclude, Since every four-sided figure has four angles therefore the square has four angles. And yet perhaps this deduction from the Universal to the Particular will not always hold good. A four-sided figure may have unequal sides? No doubt—the rhomboid has them. What then if we were to say, A four-sided figure may have unequal sides, therefore a square has unequal sides? Here the deduction from the General to the Particular would be false. And why here and not in the former instance? In the former conclusion it was assumed determinately: it has—since every four-sided figure has four angles; in the latter it was left indeterminate: since a four-sided figure may have unequal sides. The conclusion therefore from the Universal to the Particular is false whenever we are speaking of mere possible determinations of the Generic Idea. In reality here the first proposition no longer contains a Generic Idea in reference to the square, a four-sided figure having unequal sides is not the Generic Idea of the Square. But perhaps we make this rule too hastily? I think not, for the cause lies implied in the very definition of Ideas. The Particular Idea contains more than the General; but under the attributes which the Particular has in addition to those that belong to the General, there may be such as in this instance of the square incompatible with the nature of a General Idea. Thus we get another instance in which the deduction cannot be made from the General to the Particular. Can a Generic Idea as far as it is Generic have existence? No—why not? Because it wants the entire determinateness or particularity which all existing things have; therefore out of the mind every Generic Idea is a nonentity; hence said by the old Logicians to have their Beings in Thought, Entia Rationis. What if we were to say, whatever is true of the Generic Idea may be likewise affirmed of the Particular, but every Generic Idea is a nonentity; therefore every Individual subordinated to it is a nonentity. This would be manifestly false. Compare then the two cases. In the first case you will find that the contingency implied in the term "may have" applies to a Generic Idea, only as a Generic Idea—a four-sided figure taken generally may have unequal sides but any particular four-sided figure either has them or has not them—so in the second instance you will perceive in like manner that nonentity is, to use the logical phrase, predicable of a Generic Idea only as a Generic Idea. You may deduce the following rule. All that holds good of a Generic Idea only so far as it is a Generic Idea or more

generic than any other given Idea, that does not therefore hold good of the subordinated specific or Individual Ideas. You will no doubt have heard the name of this sort of argument. Yes a Syllogism. The word simply signifies a connected reasoning. The subject has been enveloped in many learned words, yet nothing in nature can be more simple. You have acquired the habit, we will suppose, of directing the attention of your Understanding to the points of resemblance between a number of individual images or sounds, or, to comprize all in one, between a number of individual objects, and you have called these acts of your mind by certain names. You remember no doubt what you are said to have attained by this process. Yes—We attain by it Universal Ideas, which are likewise called Generic Ideas, Abstract Ideas, Representative Ideas or General Ideas. Quite right. And you remember too that the nature of these Universal Ideas has been a subject of controversy among Metaphysicians, but that such controversy left the logical use of them entirely unnoticed. Now a Syllogism consists in this: I have agreed to call one class of resemblances or of Phenomena having some one point of resemblance by some one name—I see some individual object and I conclude from an examination of its characteristic properties that it is an object to which this name is applicable, and this constitutes a Syllogism. Now for instance we have all agreed to call that somewhat which makes the surrounding objects visible, light. Now I find by experience that the moon makes everything visible about me; I therefore conclude the moon is a light, in other words, I mention the Class under which a particular object is arranged with reference to some one of its properties. So again, bodies that reflect light without transmitting it we have agreed to call opaque bodies. I perceive that the moon reflects light and that it is not transparent. Here again I call it by another name and arrange it under another Class. I will multiply examples for I think it important to impress the truth as strongly as possible that all logical reasoning is simply Classification, or adding to the common name which designates the individuality and consequently the differences of things, the Generic name which expresses their resemblances. There is an individual man, John Woolman by name; he followed nature in all his actions; all men who do this we arrange under one Class and call them virtuous; John Woolman therefore is virtuous. I have learnt by experience that warmth rarifies the air—I know that the sunbeams are warm—I arrange them therefore under this Class, and say that sunbeams rarify the air. In some part or other of every Syllogism we declare or imply the Character of the Class, we assume that the Individual belongs to this Class, and we conclude therefore that the Individual must

have this Character. But is not this merely repeating the same thing in other words? Some have thought so and in consequence have asserted that all reasoning is made up of Identical Propositions. How far they speak truly you yourself have seen. Still, however, it appears to me a wanton abuse of language, for though in every Syllogism I do in reality repeat the same thing in other words, yet at the same time I do something more; I recall to my memory a multitude of other facts and with them the important remembrance that they have all some one or more property in common. The phrase Identical Proposition should be applied exclusively to those propositions which occasion in the mind no recapitulation and as it were refreshment of its knowledge and of the operations by which it both acquires and retains it. If you could take away from the human mind the power and the habit of classing its experiences according to its perceptions of likeness you would sink it to the level of the brutes; in all probability far below brutes. Whatever therefore keeps alive this habit and intends to invest it with a mechanic facility cannot be said to be barren of good effects. Now Identical Propositions are likewise called barren propositions, and should therefore be confined to such as are indeed barren—If A is A, A is A. But A is A. Therefore A is A.—A learned physician tells us the body cannot have the Smallpox twice because it is in the first instance rendered invincible to that particular poison. Now this is repeating the same thing in other words, but this of itself would not constitute it an Identical Proposition. But it does nothing more, it introduces no third Idea, it makes no reference to a Class; therefore we may with justice say that the medical philosopher in this instance imposed upon himself and his readers an Identical Proposition in the place of a reason. *That particular poison* is another phrase for the Smallpox; *that the body is rendered invincible to it in the first instance* is again but another set of words signifying that the body cannot have it twice. If the philosopher had said, There exists a Class of poisons, which having once acted on a living body introduces a specific invincibility, and it is probable that the Smallpox belongs to this Class, he would have given the grounds of the phenomenon and the solution would be satisfactory in proportion to the number of individual instances contained in the Class—nor would it be any objection that he had not enabled us to conceive the manner in which this invincibility was produced. A reason is given whenever we can classify the fact, but two or three instances will form not a Class but an Anomaly. In this instance the fact stands single, and the translation of the instance is given as the cause of the phenomenon. But when the same physician says that brandy quickens the

pulse and assigns as the reason that it belongs to the Excitantia, he here does give a logical though not a philosophical reason—that 500 other things have the same property does not indeed enable me to perceive how such a property is possible, but nevertheless my Understanding is improved and I gain valuable practical knowledge by being informed that 500 other things very different from brandy in colour, taste, form etc. are connected with it by this one important point of resemblance. Thus too Syllogistic Reasoning, by which I desire to imply the substance and not the technical forms, has been called a mere Art of Memory,[1] and no error will result from this—if only we are made to feel the full importance of such an Art, made to understand that in this Art our rational nature has its subsistence, that we both reason and act by it and would not act reasonably without it. It would perhaps lessen the reluctance of the imagination, which receives its chief delight from the contemplation of the concrete, if we were to detail the foundation that there is in nature for Classification. All the plants of a certain Class have hitherto been found poisonous; I am ship-wrecked; I find a plant with fruit on it; I have never seen the plant before; I examine the number and position of its germens, and its pistils, and by these and other characters I find that it belongs to this Class and I reason in this way—If in ninety-nine instances, which form the whole of my experience hitherto, the Species of a certain [Class] has proved to be poisonous without exception there is such a probability as ought to be acted upon that the hundredth will prove poisonous, consequently that I ought to ascertain it by experiment made on some inferior animals not on myself or any of my fellow men. This plant is the hundredth Species of this Class, which is therefore sufficient probability that this too will prove to be poisonous, and I must not ascertain the fact by an experiment on myself. This is an instance of Complex Hypothetical Syllogism grounded on a Classification of nature's own making. Whether or no the reasoning is Syllogistic will be a subject of investigation with us hereafter—at present we will recur to technical language and detail the nature and content of a Syllogism as Logicians in scholastic phrase. That by means of which we discover why a Predicate is affirmed or denied of a Subject is the reason or Ground of the Judgment. The Whale (this is the Subject) is improperly called a Fish (this is the Predicate), for it has hairs on its body and suckles its young (this is the logical ground). A Judgment when at the time we make it we think of the Ground of it, or a

[1] Referring probably to Lully, whose work Coleridge knew (see above, p. 59, and also my note, "Coleridge on Giordano Bruno," *Modern Language Notes*, XLII, 427-436).

Proposition, i.e. a Judgment expressed in words, to which we annex the Major is called a Syllogism. The Ground or reason why a Predicate belongs to a Subject—why any thing is affirmed or denied of any other thing—is in all possible Judgments the following: because the Subject is in reference to the Predicate in the same Class with some third Idea, to which the Predicate belongs—The mammoth must have been a carnivorous animal, for it has the sharp and jagged teeth which carnivorous animals possess and which distinguish them from the herbivorous animals whose teeth are broad and furrowed. Consequently all Syllogisms are formed on this Rule—If the Subject of the Judgment is in the same Class with a third Idea with respect to a given Predicate, then the Predicate belongs to the Subject, and vice versa. Animals with sharp jagged teeth are never herbivorous; the mammoth having jagged teeth is consequently not herbivorous; consequently the mammoth is not of the elephant Class —You will perceive that I purposely avoid the common forms of syllogistic reasoning that you may more clearly understand the substance and its frequent recurrence in the ordinary reasoning in common life.

I will now make you acquainted with the technical forms as far as they are connected with the Laws of Reasoning or explanatory of them, as far in short as they imply anything more than the passion of giving hard names to simple things. Logicians then have divided Syllogisms into three head Classes, the first of which is called, the ordinary Categorical Syllogism; the second, the Elyptical or abbreviated Syllogism; the third, the Compound Syllogism—the word Categorical signifying nearly the same as Generical—the Categories in Aristotle meaning those highest Abstractions of which he counted ten, but which later writers have reduced to four, under which all Ideas may be brought, and before which they may be as it were cited before the Assembly of the People or supreme Judicature. The ordinary meaning of the Word κατηγορέω is to denounce before the Assembly of the People and thence used for accusation in general. Hence when I say I demand a categorical answer I mean such an answer at once deliberate, determinate and final as you would be obliged to give to a superior Judicature before whom you had been cited. The ordinary Categorical Syllogism contains the Proposition or Judgment and two Premises and altogether three Terms; the third Term with which the Subject of the Judgment is classed in the one Premise and to which the Predicate is attributed in another is called the Middle Term. Thus, in the good old example, Every animal is a living thing; Every man is an animal; Therefore every man is a living thing—the Animal is here the Middle Term.

The Subject of the Judgment which makes its appearance in one of the Premises as subordinated to or at least in the same Class with the Middle Term is called the Minor Term, and thus in the above Syllogism Man is the minor Term; and the Predicate which in another Premise is attributed to the Middle Term is called the Terminary Major—both the Major and Minor have the common name of Termini Extremi. Of the two Premises that which attributes the Predicate of the Judgment to the Middle Term is called Enunciato Major and that which classes the Subject or Minor Term with the Middle Term is Enunciato Minor or the Assumption. The proposition which declares the Subject itself is called the Conclusion. Every animal is a living thing is the Enunciato major; Every man is an animal is the Minor Enunciato or assumption; and Therefore every man is a living thing is the Conclusion. The Major Enunciato does not always appear the first in the Syllogism: consequently it is not essential that the Major Term should make its appearance in the first or the Minor Term in the second Premise—this however affects the grammatical form not the topical substance of the Syllogism. The grammatical forms of the ordinary Syllogism are 19, and 20, if we include the form attributed to Galen, but logically there can be but two sorts. For the Minor Term is classed either as a Species with its Genus, and in this case the conclusion is drawn from the Universal to the Subordinate Particular—Because every animal is a living thing, therefore man, who stands to animal in the relation of a Species to a Genus, must be a living thing—or the Minor Term is classed as a Genus with its Species and then the Conclusion is drawn from the Subordinate to the Universal—Every animal is a living thing. Every animal is a substance; Therefore certain substances are living things. The common books of Logic following Aristotle give three figures or head Classes of Syllogisms. It [the second] differs in nothing essential from the first. The Conclusion is made from the Genus to the Species; it concludes indeed always by a Negation, but this it has in common with modes of the first and third Aristotelian Figure. We therefore adhere to our division into two main Classes, which we in compliment to the received terminology will henceforth call Figures. The first syllogistic Figure draws its conclusion from the Genus to the Species, more accurately from the more general to the less general: All men are fallible; Titius is a man, therefore Titius is fallible. The second Class draws its Conclusion from the less general to the more general, from the Individual to the Species or from the Species to the Genus. Every animal is a living thing; Every animal is a substance; Therefore a certain substance is a living thing. I confess that this second Figure

appears to me a mere barren and identical proposition. The meaning of the word Genus is, that under a certain word we class a number of others of more specific meaning than itself, and this second figure appears merely to assert that the component parts of a Class are more specific than the Class itself, in other words, that Genus is Genus and Species is Species. We should not do wrong therefore if we affirm that there really is but one kind of Syllogism[2] and that if we exclude propositions perfectly barren from the idea of reasoning, all Syllogistic reasoning concludes from the more to the less general. We have however retained the division and if there can result any advantage from this retroversive act of the mind we shall not fail to discover it in the course of our logical investigation. The utmost that can be said in favor of it seems to be this, that by reminding us that the Genus not only does not exclude but implies certain particularizations in the Species which belong to it, it may prevent rash and precipitate judgments, and it has been noticed by accurate observers that men are more often wrong in what they deny than in what they affirm. However this may be, whether we consider Syllogistic reasoning as one Figure or as two, it is subjected to the following general Rules—A proper Syllogism contains only three Terms. If it contain fewer some one is always implied; as when I say, Titius must be fallible, I imply that Titius is a man—Titius might be the name of a God or of some infallible being—I imply therefore the third Term, that of the Genus or Species. If the Syllogism contain more than three Terms it is either a Compound Syllogism, that is two in one, or it is a Sophism built on Equivocation. The virtuous Titius will not frequent the company of Sempronius the drunkard; Virtuous men avoid bad company; Titius is a virtuous man; Therefor Titius avoids bad company; But Sempronius is bad company; Therefore Titius avoids Sempronius. An instance of the Sophism from Equivocation—

Omnes canes latrant. Sirius est canis. Ergo Sirius latrat.—This in the Latin is a Sophism and Sophisms will often times endure translation as little as Puns. In English we call it not the Dog, but the Dog-star—and even tho' we had called [it] the Dog, still the use of the article *the* would have baffled the Equivocation. In the Latin the word "canis" has two meanings—the animal, dog, and the constellation called the Dog; consequently, here are two Terms in reality, tho' only one verbally. The first Rule then is that a proper Syllogism must contain only three Terms. In order therefore that you may see the whole process of the reasoning, if there be fewer terms

[2] Cf. Kant on this subject, and Coleridge's two-volume manuscript "Logic," p. 82, above.

expressed than three, you must supply the term implied; if there be more you have detected an Equivocation or you must now mold the Compound Syllogism into two or more Simple Syllogisms.

The second Rule is, No Conclusion can be drawn from two Particular Propositions. Titius is a red-haired man is a Particular Proposition; Some men are red-haired is another Particular Proposition. But we cannot conclude that Titius is red-haired because some men are red-haired, because here the words *some men* refer you to particular individuals; but you may conclude that since the man Titius is red-haired, therefore some men are red-haired because in this latter instance, the words *some men* are only verbally a Particular, but are in substance a Universal Proposition, a Proposition referring to the Genus. We may therefore express the Rule thus—In every Syllogism one of the Premises must refer to a Genus, for one of the Premises must either say that the Predicate of the Conclusion universally belongs to the Middle Term as in the first Figure or that the Minor Term is a Genus to which the Middle Term is subordinated, as in the second Figure—in both cases one of the Premises must be Generic. The third Rule is, From two Negative Propositions nothing can be concluded for in all Negative Conclusions the contradiction between the Subject and the Predicate of the Conclusion is no otherwise conceivable than because the Subject is subordinated to some Middle Term to which the Predicate is contradictory; consequently one of the Premises must be affirmative. There are little grammatical tricks, which dress up Affirmative Propositions in the language of negative ones, but it is a trick which Common Sense will at all times detect without much difficulty. The fourth Rule is, If one of the Premises be particular, the Conclusion must be so likewise; for if the Subject of the Conclusion is subordinated to the Middle Term to which the Predicate belongs only as a Particular or Species, as in the first Figure, or when the Predicate belongs to the Middle Term only as far as it is considered specific, as in the second Figure, the word *substance* is rendered specific or if I may say so, degeneralized by the prefix some—in either case it is alike impossible that the Predicate can belong unavoidably to the Subject. Every Animal is alive; A certain Substance is an Animal; Therefore a certain living thing is a Substance. The fifth and last Rule is this, If one of the Premises is in the negative the Conclusion must be so likewise for if the subject is subordinated to some Middle Term, to which the Predicate does not belong, or if it have the Middle Term subordinated to it as one to which the Predicate does not belong, in either case the Predicate must wholly or in part be denied of the Subject likewise. You and I are by this time equally tired of thus wrapping

up plain truths in technical terms. The truths are indeed in the concrete or particular instances so palpable that it is scarcely possible to make any mistake respecting them; the technical terms on the other hand so remote from our common habits of conversation and writing that it is scarcely possible not to confound them. It cannot be denied however that it is not possible to generalize completely without the use either of technical terms or particular instances which are in their nature perfectly representative or generical, such as lines, figures or the letters of the alphabet, which are as difficult to be remembered as technical or abstract terms. You are well aware of the importance of generalization and the advantages of being able to express such generalizations in appropriate and perfectly unobjectionable language. You will therefore consider the last 7 or 8 pages as containing mere exercises to try your patience if you please or the steadiness of your attention. Permit me to repeat that I have thus introduced and thus clothed them not so much for the truths which you will learn from them as for the habit which you may exercise by them. When you are by yourself you will read or perhaps write them over again, adding in the margin such particular instances as may illustrate and as it were construe each abstract term, writing in the first place two complete Syllogisms, one of the first class, the other of the second, taking care that the terms in each shall be different words from those in the other, and these words and particular instances being added marginally to the abstract term in the Rule will keep your attention steady, as an orange and a lemon placed on the table while we were discoursing on the difference between orange and lemon colour, and at the same time familiarize you to the valuable habit of seeing the Universal in the Particular, the Abstract in the Concrete. Some men are the slaves of their senses, others the dupes of words; to prevent both the one and the other of these diseases we should to every general rule annex in our minds one or more particular instances and often, tho' not universally, make or remember some general rule at the time that you are noticing individuals and particulars.

I have expressed a doubt concerning the second Figure, which is, you remember, the third figure in Aristotle. We will consider this as sub lite; all the rest, however involved in technical language and whether wisely or unwisely involved in it, do nevertheless detail and illustrate the actual processes of human reasoning. The other Rules and terms respecting Judgments, Propositions, the Figures of Syllogisms and the modes of those Figures appear to me I confess a mere Farrago of hard Names, a lust of Classification where Classification can answer no one wise purpose, where in short Class itself can never

be mistaken while the logical exponents or technical phrases expressive of the Classification will never be remembered. I will not however anticipate the discussion which we have promised ourselves respecting the Value of Logic as it at present exists, and that we may be the better prepared for it I will at our next meeting give you a short history of the Aristotelian Logic, preferring the historical mode of explaining to you terms which can have no interest unless historically considered.

(Then follow the "Outlines of the History of Logic," pp. 54-66, above.)

V. *The Aristotelian Logic. Autograph Fragment, continuation of the History of Logic* (pages unnumbered).

Aristotle begins[3] by noticing certain differences in the uses of words, namely, 1. Hononymes, or words of equivocation, as when a living and a painted animal are both called by one name, "It is a dog." The same word demands a different *Definition* in the one case, from what it does in the other. 2. Synonymes, or univocal words, when a Man and a Lion are both called, animal. By Synonymes Aristotle means Generic Terms.—3. Paronymes, or Denominatives, such as Grammarian from Grammar, Astronomer from Astronomy.* (*This short first Chapter, containing in the original not more than a dozen lines, conveys the *purpose* that accompanied the mind of the Philosopher, during the whole of the work, namely, the ready detection of Sophistry. All just reasoning is confined to deductions from Terms truly generical, or what Aristotle calls Synonimes—for these the Sophists introduced Hononymes, and produced by their means the most ludicrous sophisms—ex. gr.—
Omnes canes latra[n]t.
Canis cælestis est canis.
Ergo Canis cælestis latrat—
And in the like manner another sort of Pun sophisms were made by the substitution of Paronymes for Synonimes—a species of nonsense, to which the Greek Language is more obnoxious, than our's.—I remember that at college we used to call a remarkably dull and prolix Talker the Spectator, because he was *genuine Prose;* which was the cant phrase for a dull converser. Yet it is difficult to conceive, how such Conundrums could ever have formed the subject of serious, philosophical Detection. This is however the fact, as Aristotle's Work De sophisticis Elenchis sufficiently proves.)—

He next divides all the objects of the human mind into the two classes of the λεγόμενα, i.e. what are *said,* and the Ὄντα i.e. what *is,*

[3] The "Categories," or first section of the "Organon."

unless indeed the first period of this second chapter belongs, as I suspect, to the first.—It is in the character of the first, and simply divides "what we say" into things said with, and without connection, A *Man*—A Man conquers. The Onta he subdivides, 1. into such as can not be called either a part or property, but comprize the whole; thus the man, is neither in Plato nor any way a part of Plato—2. into such as are in the Subject, but cannot be affirmed of the Subject —and in the Subject, not as a discerpible part, but as a quality or property—for instance, Geometry is in the mind, but it cannot be said, of the mind is geometry—then too you cannot affirm that White is the essence of any thing, but you say, not The Board is whiteness, but the Board is white. 3. Such as are both said of a subject, and are at the same [time] in a subject—thus Science is in the Soul, and Geometry is Science. 4. Such as are neither in a subject, nor said of a subject, but the subject itself, for instance, any one Horse. This is almost a translation of the second Chapter. The Legomena are distinguished from the Onta, and the Onta are divided into such as refer the mind to the whole Class, to the which the Subject spoken of is subordinated—for instance, the Man, Plato—these are called by after logicians, Substantiæ universales—2. into particular accidents, as my knowlege of Geometry. 3. into universal accidents, as knowlege—it belongs to the very nature of mind, yet still you cannot say that the Mind is knowledge—4. into particular Substances—Thomas, John, Peter.—(We must not therefore translate Legomena by General Terms, and *τὰ ὄντα* by things actually existing—for the three first divisions of the Onta, are clearly nothing more than General Terms—The *Man* Geometry Knowlege. this explanation seems in the original to border at least on an equivocation,

τὰ δέ, καθ' ὑποκειμένου τε λέγεται, καὶ ἐν ὑποκειμένῳ ἐστίν, οἷον ἡ ἐπιστήμη ἐν ὑποκειμένῳ μέν ἐστι, τῇ ψυχῇ καθ' ὑποκειμένου δὲ λέγεται, τῆς γραμματικῆς.

The word *ἐπιστήμη* appears to be used in a different sense relatively to the mind, from that in which it is used relatively to the art of Grammar. If we translate it, Science—it seems a strange Play upon words to say, that Science is a property of the mind, and Grammar is a Science—and if we translate it, the Science, which indeed would be clearly false, it says only that Grammar is grammar, and would belong to the fourth division.—To answer this objection we must think of Grammar or Geometry, not as a *book* or *thing*, but as it exists in the mind of the Grammarian or Geometrician—in this sense, we may justly say, that knowlege is a property of the mind, and that Grammar is knowlege.—The distinction of the Dicta from the Entia, I confess, I cannot at all understand—or why the phrase "Man runs," should belong exclusively to the former and Knowlege

is a property of the mind, to the latter. But it by no means appears, that Aristotle meant an absolute distinction. You may have two separate Classes; and many of the subordinate individuals, according to the view taken of them, may be found in both. Animals—and Spirits—Man would be found under both—

[The manuscript breaks off here abruptly at the end of a page; the remainder of the book is blank.]

APPENDIX B

SUPPLEMENTARY TO THE MANUSCRIPT "LOGIC"

FROM an Autograph Draft of a Letter about Unpublished Works (attached to British Museum Manuscript, Eg. 2826; no date, but apparently written about 1825, after the publication of *Aids to Reflection;* manuscript shows sundry revisions).

My dear Sir

WITH this you will receive the copy of the Aids to Reflection, which I had been mustering courage to send to Lord Liverpool. It came like a Breeze in one of our hot soundless Summer-moons, which one *sees* rustling in a Tree, and in the next moment feels on one's forehead, when you were so good as to say that you would present it yourself to his Lordship. And I should avail myself of your kindness without scruple, if the value of an offering were to be measured by the sincerity and thoughtfulness of the Respect which dictated it. But had you not been convinced of my sentiments on this point, you would not have undertaken the charge. I have three works, the fruits of a laborious life, if hard thinking and hard reading are labor [,] one finished and transcribed for the press, another and far larger work, my Opus Maximum containing the sum and system of my philosophy and Faith on reason and revelation, the life of Nature and the history of Man, of which the MSS *materials* are complete, and somewhat more than a third of the Work reduced to form, and in a *publishable* state—and lastly a complete volume in which the main *Results* of the preceding are given in a dramatic and popular form, entitled Travels in Body and Mind, or the Sceptics Pilgrimage to the Temple of Truth.[1] Of this last work I expect to

[1] Folios 37-42 of Egerton 2801 contain an autograph fragment that may well be a portion of the proposed "Travels in Mind and Body." In the Museum catalogue it is listed simply as "Note on Reason for Insertion in Some Work." The section preserved commences (f. 39) with page 5 and continues through page 11 (f. 42). Pages 5-10 are on the Reason. Folios 37 and 38 contain the following passage marked "Insert at p. 10, last line but six."

"And here I must pause and address my Reader, as a Volunteer who has found me on the March, and who if he has not always been able to keep up with me, has however kept me in sight, as one whom he had taken on trial in the double capacity of Pioneer and Guide—. and lo! I have led him not only to the extreme verge of the Terra Firma, but to the utmost point of a narrow Tongue of Land that runs far out into the deep water. There is neither Boat nor Raft nor any likelihood of either, only I point to an object

have the concluding sheet ready for the Printer before the end of October next, so as either to appear at the same time with the first work, or immediately after the publication of the first which (permit me to say out boldly what I think and believe), in addition to it, on the vast importance of the subject, are intended for public life,[2] as an indispensable ingredient in every scheme of education that deserves the name liberal and to it's specific utility as the ground work, for all who are in training for the Bar, the Pulpit, or the Senate, or whose stations require or incline them to speak in public, furnishes the key and contains the preliminaries to my other works. The object of this work, and it's principal *contents* are given in the Title page—The constitution and limits of the Understanding, with the Canons of Legitimate form in all conclusion, the criteria of Truth and Falsehood in the Premises, with a reduction of all the modes of deceptive argument to a few distinct classes, with examples of each, commencing with some Bull, or broad and palpable Absurdity, and thence shading off through intermediate instances, close with some paralogism that had deceived a nation, and tyrannized over a whole Age: and yet resting on the same equivocation, as the first, with the Causes of the different effect on the Readers or Hearer's mind. Something of this sort, showing the influences of psychological causes on forensic Logic, Aristotle had annexed to his Organon—I conjecture from one of the latter chapters, which is manifestly a fragment. And as I have carefully selected the intermediate examples from writers of great authority, or from popular works with frequent references to facts of history, as demonstrating the power of words for evil and for good, I flatter myself that I should not overrate the practical utility of this chapter if I entitled it Organon verè Organon—and if I were consulted by a Student for the Bar, or by a young man whose birth and fortune entitled him to look forward to a Seat in the Legislature [I could propose no better way] of giving firmness and agility to his judgment than by framing a common-place book on this scheme, and multiplying the examples under each head as they occurred in the course of his reading etc. for with the *knack* of instantly detecting a Sophism in whatever disguise, he would learn

in the distance which I describe as a goodly Vessel, prepared to weigh anchor, the instant we should get on board. That, Friend (I say) is the good Ship, Philosophy, bound on a voyage of discovery for the Fortunate Isles, where Truth *lives*, as the acknowledged Regent tho' in filial subordination to the Good, as the Supreme Power." (Then follows the passage quoted above, p. 50, page 11 continues with the passage quoted on p. 1.)

[2] It is not possible to ascertain from the manuscript exactly how Coleridge meant this to read.

likewise the means of exposing the *fallacy*, how to discern it and strip it of its plausibility.

By the publication of these two works I shall have disburdened my conscience and then (if please God to prolong my life) shall interpose a year or two, which I mean to employ in bringing the substance of my Lectures on Shakespeare, Milton, Dante, and Cervantes into publishable shape, and in poetic composition being assured by my past experience that no month will pass without some addition to my Opus Maximum on which I chiefly rely for the proof that I have not lived or laboured in vain.

PHILOSOPHIC, SCIENTIFIC, AND LITERARY REFERENCES

(Persons referred to in the MS "Logic," Egerton 2825—Vol. I, and Egerton 2826—Vol. II)

Addison, T. (*Spectator* No. 94),	II, 264.
Akenside, M.,	II, 317-318; 318-319.
Anaxagoras,	I, 56.
Aquinas, Thomas,	II, 292.
Archimedes,	II, 382.
Archytas,	II, *facing* 329.
Aristotle,	*passim*.
Augustine, Saint,	II, 126-127.
Bacon, Francis,	*passim*.
Barbarus (Hermolaus),	II, *facing* 382-383.
Baumgarten, A. G.,	II, *facing* 330.
Baxter, R.,	II, 401-402 and note.
Bayle, Pierre,	II, 156.
Beattie, James,	II, *facing* 306.
Beddoes, Thomas,	II, 304; 362.
Berkeley,	*passim*.
Brown, John (quotation wrongly attributed to Pope),	II, 328.
Brown, Thomas,	II, 293.
Browne, Sir Thomas,	II, *facing* 210.
Catullus,	I, 13.
Clarke, Samuel,	II, 233; *facing* 330; 333.
Claudian,	II, 416.
Condillac,	I, 6; II, 292; *facing* 394.
Copernicus,	II, 167; *facing* 210.

Cosmo (son of), II, *facing* 394.
Darwin, Erasmus, II, *facing* 447.
Davy, Humphry, II, 350.
Defoe, II, 263.
Descartes, *passim.*
Digby, Sir Kenelm, II, 308.
Drelincourt, C., II, 263.
Epicurus, *passim.*
Fichte, II, 280.
Ficino, II, *facing* 394.
Gray, Thomas, II, 281.
Harris, James (cited in paraphrase of Mendelssohn), II, 117-119.
Hartley, *passim.*
Harvey, *facing* 214.
Heraclitus, I, 53.
Herodotus, I, 49.
Hertz, Marcus, II, 405-406.
Hippocrates, I, 48; 53.
Hobbes, *passim.*
Homer, *passim.*
Hooker, Richard, II, *facing* 41; 214.
Hume, *passim.*
Jotham, I, 45.
Juvenal, II, 137; 200.
Kant, *passim.*
Kepler, II, 167, 307.
Kirby, William, II, 51 ff.
Laplace, II, *facing* 41; 309-310.
Lavoisier, II, 304-305; 351.
Leibnitz, *passim.*
Lessing, II, *facing* 33.
Locke, *passim.*
Lycurgus, I, 50.
Magee, William, II, *facing* 305-306.
Malebranche, II, 358.
Mendelssohn, Moses, *passim.*
Menippus, I, 45.
Mirandula, II, *facing* 394.
More, Henry, II, 100.
Newton, Isaac, II, *facing* 41 and 135; 167; 385.
Onesimus (author of), II, *facing* 331.
Oswald, James, II, *facing* 306.

Ovid (cited in paraphrase of Mendelssohn), II, 118.
Paine, Thomas, II, *facing* 331.
Paley, William, II, 315.
Phædrus, I, 45.
Phocion, II, 307.
Pindar, I, 52.
Plato, *passim.*
Plotinus, II, 51; 407.
Polemo, II, 209.
Politian, II, *facing* 393-394.
Polycletus, II, 4.
Pope, II, 229; 363.
Pope (false attribution to), II, 328.
Priestley, J., II, 292; *facing* 305-306.
Pythagoras, *passim.*
Réaumur, R. A. F. de (cited in paraphrase of Kirby and Spence), II, 51.
Reid, Thomas, II, *facing* 306.
Ruhnkenius, D. I, 38.
Scheele, K. W., II, 350.
Schelling, I, 74.
Shakespeare, *passim.*
Spence, William, II, 51 ff.
Spenser, I, 29.
Speucippus, I, 56; II, 206.
Spinoza, II, 333.
Stanley, Thomas, I, 74.
Steele, R., II, 157.
Sterne, L. (cited in paraphrase of Mendelssohn), II, 123.
Thucydides, I, 48.
Tucker, Abraham, II, *facing* 331.
Virgil (cited in paraphrase of Mendelssohn), II, 118.
Voetius, II, *facing* 287.
Voltaire, II, 331; *facing* 382-383.
Watts, Isaac, I, 6.
Wissowatius (Leibnitz on), II, *facing* 419.
Wolff, Christian von, II, 350.
Wollaston, W. H., II, *facing* 330, 333.

APPENDIX C

S. T. C. MARGINALIA IN VOLUMES ON LOGIC

MANY of the marginalia essential to a study of Coleridge's logic have been published or are in process of publication. The following, not before printed, are taken from the annotated copies of Wolff's *Logic* and Hegel's *Wissenschaft der Logik* in the British Museum collection of Coleridge marginalia.

I. Autograph Marginalia in Wolff's *Logic* ("Logic, or Rational Thoughts on the Powers of the Human Understanding. . . . Translated from the German of Baron Wolfius," London, 1770). B.M. number, C.43.b.2.

Pp. 18, 19, 20 (On notions—clear, distinct, confused, complete, incomplete, adequate, inadequate).

Text: ". . . our notion of the Red colour is clear, yet undistinct or confused."

Comment: "This is erroneous. For red is not only a clear but a distinct notion—that is, that which I can instantly distinguish from green or any other color. That I cannot distinguish it's component elements, because to *us,* in our present state of knowledge, it is itself a simple element of visual sensation, cannot surely make it confused. But I suspect that the error is in the Translation of *undeütlich* by *confused:* and the equivocal word, undistinct, for indistinguishable—. I cannot explain the notion, Red; I can only *recall* it.—A man may never have seen the tri-coloured flag; but if he has seen, blue, red, and white, separately, I can give him a true notion of it. *Deutliche* Begriffe are therefore always of compounds or conjunctions.—Indeed I doubt, whether it be not inconvenient to use the term, notion, of any mere perception or recollection of a simple sensation. Vorstellung or Representation would be preferable. For all Knowledge, *notio,* is of the combinations, relations, likenesses and differences, of Things. —Simple sensations, and their representatives in the memory, being premised under the name of Elements, our Notions might be divided into 1. clear. 2. distinct. 3. contra-distinct, or essential. 4. Compleat. (The distinction between compleat and adequate I do not understand, unless the latter mean *sufficient:*—which must vary ad hominem et ad usum, and therefore no part of logic—or unless it be resolved into 5 Immediate.—The contrary would be 1. Faint. 2. Confused. 3.

Neither, yet not scientific. 4. Incompleat. 5. Mediate.—1. I look at a Rose for the first time, as a Whole. 2. I also distinguish the component parts. 3. I have discovered, which of these parts is peculiar to the Rose. 4. Neither of the Rose or of any existent thing can I have a compleat notion; tho' I may have of a mathematical Line, because it is only that which I define it as being. 5. It is still a controversy among philosophers, whether my notion of God is immediate, or intuitive or whether it [is] mediate or discursive. In this sense only can I understand Spinoza's assertion, that we have an adequate idea of God.—My objection to Wolf's arrangement is it's variableness, it's ambulatory nature—and that it is merely comparative, or endless and non-existent. For instance: I have distinct notions of the striking of the Bell, of the Hour, and the Indicator, and W. calls this an adequate idea of a Clock—but another man has perhaps more distinct notions of gravitation, or the laws of vibrating particles, of the relation of the Clock to Time local and to Time solar—and the latter cannot be more than adequate, yet more than the former, which therefore, cannot be adequate. And if by adequate he means only a knowledge sufficient to form a distinct idea, why make it different from distinct—and how arbitrary to make the term, distinct, signify only a certain degree of distinctness? Now my classification corresponds to actual, different, states of knowledge."

P. 35.

Text: "If by the senses we are led to a notion of any thing, we are not to doubt its possibility. . . ."

Comment: "This is equivocal. The senses tell me only, that I see, or hear, &c. such and such sights, or sounds: it is my Judgement, that must decide on their real, i.e. extraneous, existence. Doubtless, whatever is real, must be possible in the sense, in which it is real. But in a fever I am led by my senses to see a Fiend with Horns and fiery Eyes at the bed's foot—but my Judgement tells me, that I am in a fever—and that this Sight does not refer to a correspondent Reality, because it is not possible. We decide almost as often that a thing is real because it is possible, as that it is possible because it is real—for instance, philosophers formerly smiled incredulously at many tales of Herodotus & [?] which from increased knowledge of causes they now credit."

P. 39.

Text (p. 38): "If a distinct notion is complete; (§15.) that is, of such a nature, as only to agree to the individuals of the same species or genus, and consequently to be distinguishable at all times from all

other things, that have any affinity with them, this I call a Definition; which consequently is a distinct complete notion of a species or genus: But if, in consequence of a notion, we can distinguish a certain thing under given circumstances only, for a given time, from other things present; this I call a Description."

Comment: "What W. names a complete, I call a scientific, notion. My notion of the Bella Donna would be scientific, if I know its peculiar sexual characters, joined with those marks, of leaves, color &c. which distinguish it from other sorts of Nightshade: even tho' it's poisonous qualities were unknown to me; but it would not be a *compleat* notion of the Plant—So, that the Circle is a curve line, all the radii from the centre are equal—or that it is a figure formed by a line, one end of which is fixed and the other moveable—is a scientific idea; but a circle has countless other properties equally peculiar —it cannot therefore be called a compleat idea."

P. 80.

Text (pp. 79-80): ". . . Three kinds of Syllogisms have been formed, which are called Figures, and in particular, Figure First, Second, and Third, some adding a fourth, wherein the Middle Term is the Predicate in the Major Proposition, and the Subject in the Minor. An example of the first Figure you have above, (S.6.); of the second is the following:

'Every prudent Man has a regard to futurity:
'Some Babblers have no regard to futurity;'
Therefore 'Some Babblers are not prudent.'

An example in the third Figure is this:

'No Fool has a regard to futurity:
'Some Fools are rich;'
Therefore, 'Some that are rich have no regard to futurity.' "

Comment: "This is not worthy the name of a logical syllogism: or any other figure but the first. For the business of a Syllogism, and of simple Logic in general, is the Resolution of Truth: whereas these Figures are involutions. It is a wanton putting an affirmative in the major, and a negative in the minor—instead of making both negative—
Imprudent men have no regard to Futurity—
Babblers have no regard to Futurity—
Ergo, B. are imprudent men—Or if it were denied that imprudence necessarily implies disregard of Futurity, it is but to add the word 'profess' and the objection is removed—or in two syllogisms.

Prudent minds regard futurity
Some men regard futurity.
Ergo, some men have prudent minds
Those who disregard futurity, are not prudent
Babblers disregard it
Ergo, B &c—"

P. 106.

Text: "We sometimes seem to draw a Conclusion from a single Premiss; which manner of reasoning is called an *immediate Consequence.* As if I say,

'A Triangle is a figure';

Therefore, 'Whoever describes a Triangle, describes a figure.'

Here it should seem, as if I immediately drew one Proposition from another. But it is evident, that the one of these Propositions alone cannot possibly lead me to the other. . . . This appears still more evidently in other instances. For example, if I say,

'Every Animal perceives';

Therefore, 'Some Animals perceive.'

This in fact is an Enthymeme, in which the Minor, viz. *Some Animals are Animals,* is omitted. And here, in passing, I observe, that the Proposition is Identical."

Comment: "Here the major is omitted, as taken for granted; but the actual process of the mind, tho' unrememberably rapid, is still syllogistic:
Any figure described is a Figure.
A Triangle is a figure.
Therefore, whoever describes a Triangle describes a Figure. . . . In short, it is either 3 or not 2, and the latter is almost always the case. As in this instance, the Term Triangle is evidently used for the mathematical Figure, not for a *Thing:* or the Premise would be false—But if a math. fig. then it is one indentical prop—a Triangular Figure is a Figure. So in the next—Some and every one here of exactly the same import or else it would be—

All animals perceive—
But some Things are Animals—
Therefore, some Things perceive.

The true rule for syllogistic reasoning is never to divide in words, where there is no possible division in the Conception, either by ignorance or forgetfulness. Now the meaning of the word 'every' in the Enthymeme is 'not *only some but all.*' The second therefore instead of adding as it should do, to our distinct view, diminishes.

It is not a new position; but a repetition of a part of it. When I say, Socrates is a man, I say something not self-evident—it might be the name of an Angel or a Dog."

II. Autograph Marginalia in Hegel's *Wissenschaft der Logik*, 1812 and 1816, B.M. number C. 43. A. 15.

First fly leaf.

"The Einleitung not free from a confusion of Thought; but the first 40 or 50 pages of the First Book seem to me bewilderment throughout from confusion of Terms—originating in the πρῶτον ψεῦδος of overbuilding the πρόθεσις by the Thesis, Antithesis and Synthesis. The Presupposition is confounded with the Position and Counter-position—and thus that which is exclusively Subjective (ex. gr. Nichts) assumed in that which is neither Sub. nor Obj. because it is the Identity of Both."

Second fly leaf.

"According to my insight, the following is the truer Genesis of our primary notions.

Prothesis
= The
Identity of Sub- and Ob-ject
= Reines Seyn

Thesis		Antithesis
Subject	×	Object
Seyn	×	Existenz
Nichts	×	Etwas
Denken	×	Ding

Synthesis

Das Werden Anschauung

See p. 41, 42/Thus too,
Seyn + Nichts = Existenz
Nichts + Denken = Etwas
Denken + Etwas = Ding, i.e. etwas *gedacht*

[× stands for Coleridge's sign meaning *contra-distinguished to*.]

Nichts is at all times *subjective*—that is, a *word*, expressing the relation of Being not manifested, relatively to the Subject, *to whom* it is not manifested. In plain English *Nothing* = Nothing *to you*. An Objective Nothing is not so truly *non-ens* as *non-sens*—it is an absurdity *Ob*jacet quod omnino non facet."

Third and fourth fly leaves. [Here Coleridge gives a key, unnecessary in the present instance, of symbols that he uses for "equal to," "contradistinguished to," and "added to"; then the following note.]
N. B. It is a general rule, that the Prothesis in its self-duplication, or polar divolution communicates it's name to the Thesis. Protheseōs Dignitas remanet in Thesi. Thus

τὸ ὄν self-manifested in the Trinity
=τὸ ὄν ———————— ὁ λόγος
=
τὸ ἅγιον πνεῦμα

The Word is the Son of God, in the co-eternal filiation of whom God is the Father. It would be false Grammar but sound Philosophy to say, Deus est Pater, dum est Fili*um*—namely, est as a verb transitive, = izz es or is-es—by being gives being too.

Whether the primary error of opposing Seyn to Nichts, instead of nicht seyn affects the work throughout, I have not read enough of it to discover. But I hope, that much may be retained by substituting for Nichts das relative Seyn, relative, I mean, to Existence—the omneity in Each, the Infinity in the Finite οὐδὲ υἱός, εἰ μὴ ὁ πατήρ, says the Scripture in the Text so misinterpreted by the Arians and Socinians—the true meaning being—of this day knoweth no man, no not the Angels, no not even the Son, except as = The Father—i.e. not as the Antithesis, except so far as the Antithesis is one with the Thesis in the Prothesis, the dignity of which remanet in Thesi.
Availing myself of the same construction, I would have inscribed on my Tomb-stone:

οὐκ ἦν εἰ μὴ ὃ ἀεὶ ἔστι καὶ
ἐγενόμην οὐκ εἶμι· ἀλλ' ἔσομαι
Now the οὐκ εἶμι εἰ μὴ ὃ ἀεὶ
ἔστι· ἀλλ' ἔσομαι γενόμενος is

the true sense of the Nihil Philosophorum—viz. the *pope* of the Future.

In this sense only should the Nihil be used, subjectively to wit and as the Nihil limitatum—and it cannot without erroneous consequences be confounded with the Nihil limitativum—which indeed is in *no* sense Nihil, but on the contrary a Vis apparens—for who would confound the outline of a Leaf with the Fall of an arrow, or the extreme point, to which I can reach, with the outline of my Hand and Arm?—

P. 31 (On Anmerkung 2, I. Buch I. Abschnitt, I. Kapitel).

"Strange! Before the distinctions of objective and Subjective have

been noticed, we have a modification of the latter brought forward, as forming a class of primary Notions—Gemeynten!"

Pp. 41-43 (On Anmerkung 4).

"I seem to perceive a logical informality in this reasoning—viz. that the *"To be"* (Seyn τὸ εἶναι) is opposed to the "Nothing" (Nichts) whereas the true Opposite of "To be" is "Not to be." Thing, is the opposite to Nothing: for even Something or Somewhat (Etwas) implies more than 'Being' and belongs to predicable *Ex*istence, having as it's proper opposite nowhat or not-anything. Therefore, I would not say Das Seyn ist Nichts; *but* Das Nichts ist das reine Seyn in der Existenz or das *reine* Seyn in und mit dem *existirendem* Seyn—the *Potential* or Existence, as it were. It follows then, that in Hegel himself "ist es nicht Dialectic sondern Sophisterey zu nennen"—and that it is an equivocation to affirm, simply, Nichts ist das Seyn im Werden, whence doubtless it might be inferred, that das Werden die Einheit des Nichts und des Seyn ist—and so again: that Nichts dem Seyn gleich sey. The true position is: das Nichts ist das Seyn im werden zur Existenz. S.T.C.

"See the blank page, at the beginning of the volume."

P. 47 (I, Buch, I. Abschnitt, II. Kapitel. A.1, Daseyn überhaupt).

Text: "Daseyn ist das *einfache* Einseyn des Seyns und Nichts."

Comment: "Substitute for this strange phrase the simple words 'partial manifestation': and what would the Reader lose but a *stare?*"

P. 54.

"A treatise concerning Synonymes &c in any language, if accurate, is highly valuable to those who speak that language. But Philosophy ought to be translatable into all languages. But here the definitions are not accurate, even as German, and yet as German idioms, they are *plausible* to Germans only."

Pp. 54-55 (Anmerkung, II. Kapitel, A.1.b.).

"Even this is a proof (one among many) of the neglect of sound Logic by the disciples of der neueste Philosophie, and that the Rückfall from Kant has avenged itself. There is no reverse (umgekehrt) in this—the Platonic Republic is an Idea, ohne Erscheinungskraft, the Prodigal's expenditure ist eine Erscheinung, or outward reality, which cannot *last* because it is it's own root—He spends 2000L in one year—this ought to be the fruit of 50,000L, in order to *last*—

but it is the whole Tree—Still the 2000L is as much a reality as the 50,000L."

P. 56 (II. Kapitel, Anmerkung following B.a.3).

Text: "Das Ding-an-sich ist dasselbe, was jenes Absolute, von dem man nichts weisz, als dasz Alles eins in ihm ist."

Comment: "No! not the *same* as the *absolute;* but as it's Idea in *God*. In the Absolute (i.e. the *Almight*) there is neither Division nor Distinction; but in God, *whose* is the Almight, there is *each* as well as *all,* perfect unity, but yet *distinction.*"

P. 65 (II. Kapitel, B.2, Bestimmtheit).

"This is Spinosism in it's superficial form = Ocean and Waves: the utter insufficiency of which to solve the problem of the World has been shewn by Leibnitz and Kant. It may explain a wave; but not a Leaf or an Insect."

P. 75. (II. Kapitel, B.3.c. Negation).

"True! and even this position is τὸ πρῶτον ψεῦδος of Spinoza's Ethice. He attributes to Determination (= determin*are*) what belongs exclusively to the being determined (= determin*ari*)"

P. 89. (II. Kapitel, Anmerkung following C.3).

Text: "Denn Seyn ist zwar selbst das Unbestimmte. . . ."

Comment: "This is the first sensible Remark, I have met with. It occurs in Plato, who forbids us to call God the Infinite—God being more truly the common measure of the Infinite and Finite."

P. 91 (III. Kapitel, Das Fürsichseyn).

Text: "Wie nun das Daseyn sich zum Daseyenden bestimmt oder macht, so bestimmt erstens das Fürsichseyenden, oder zum Eins. . . ."

Comment: "My Stars! Now we *pop* upon it all at once. The To-self-subsist [*blurred*] itself into the Self-subsisting, oder zum Eins- &c itself! And so comes Repulsion, Attraction, and Quantity. What Christian Heart could desire a clearer account—a more luminous elucidation?"

INDEX OF PERSONAL NAMES

ABERNETHY, John, 16-42 *passim*, 48
Adams, Joseph, 25
Addison, Joseph, 155
Aeschylus, 110
Ainsworth, Robert, 137
Akenside, Mark, 155
Allsop, Thomas, xiii, 41, 72
Anaxagoras, 155
Aquinas, Thomas, 93, 155
Archimedes, 155
Archytas, 155
Aristotle, 104, 150 ff., 155, *et passim*
Athanasius, 139
Augustine, Saint, 155

BACON, Francis, 10, 33, 50-66 *passim*, 76, 77, 85, 118, 123, 155
Barbarus (Hermolaus), 155
Baumgarten, A. G., 73, 155
Baxter, Richard, 101, 126, 128 note, 139, 155
Bayle, Pierre, 155
Beattie, James, 124, 155
Beddoes, Thomas, 24, 26, 123, 155
Bell, Andrew, 45, 46
Berkeley, George, 62, 91, 155
Biggs, Nathaniel, 52
Blumenbach, Johann Friedrich, 24, 26
Boerhaave, Hermann, 69 note
Böhme, Jacob, 23, 25, 27
Bolton, Robert, 139
Brabant, Dr., of Devizes, 25
Brown, John, 155
Brown, Thomas, 93, 155
Browne, Sir Thomas, 120, 155
Bruno, Giordano, 144 note
Buck, Gertrude, ix

CAMPBELL, James Dykes, 24, 34, 36, 44, 71
Carlisle, Anthony, 25 note
Catullus, 155
Cervantes, 139, 155
Charnock, Stephen, 139
Chrysippus, 63
Cicero, 64
Clarke, Samuel, 91, 121, 155
Claudian, 155
Coleridge, Bernard, Lord, ix
Coleridge, Derwent, xii
Coleridge, Ernest Hartley, xi ff., 17, 23 note, 45
Coleridge, Gerard H. B., ix, 17 note
Coleridge, Henry Nelson, xii
Coleridge, Luke, 24
Coleridge, Samuel Taylor, *passim*
Coleridge, Sarah, xii, 16, 25, 80 note
Collins, William, 20
Condillac, Étienne Bonnot de, 50 note, 58, 59, 92, 104-105, 136, 155
Copernicus, 155
Cosmo, Son of, 156
Costard, George, 140
Cottle, Joseph, xiii, 1, 52
Crompton, Peter, 24
Crookshank, F. G., 20 note
Cudworth, Ralph, 139
Cumberland, Richard, 139
Cumston, C. G., 20 note
Currie, James, 24

DALTON, John, 27, 28
Dante, 155
Darwin, Erasmus, 26, 156
Davy, Humphry, 16-32 *passim*, 156
Davy, John, 27 ff.
Defoe, Daniel, 156
De Quincey, Thomas, 25, 45
Descartes, René, 50 note, 59, 63, 156
Digby, Kenelm, 94, 156
Dodds (see Powell, A. E.)
Drelincourt, Charles, 156

EDWARDS, Jonathan, 139
Eichhorn, Johann Gottfried, 138
Epicurus, 156
Eubulides, 64
Euclid of Megara, 63, 64
Euclid, the Geometrician, 63, 73, 124, 134

FABRICIUS, Johann Albert, 140
Ferriar, John, 26
Fichte, Johann Gottlieb, 156
Ficino, 156
Firmin, Giles, 139

GALEN, 146
Garrison, F. H., 18 note
Gibbon, Edward, 138
Gillman, A. W., 25 note
Gillman, James, xi, 9, 16, 17, 24, 25
Gillman, James, Jr., 46
Gillman, Lucy E. (see Watson, Mrs. H. G.)
Godwin, William, 50 ff.
Gray, Thomas, 156
Green, Joseph Henry, vii, 3, 8 ff., 20 note, 25, 33, 43, 44, 53, 66 ff. *passim*
Guthrie, William, 51

HALE, Matthew, 139
Hall, John, 42
Haney, John L., ix
Hanford, J. H., 106 note
Harris, James, 85, 156
Hartley, David, 40, 92, 105, 156
Harvey, William, 120, 156
Hegel, G. W. F., xii, 71, 162-165
Heraclitus, 156
Herder, J. G. von, 43
Herodotus, 108, 138, 156, 159
Hertz, Marcus, 156
Hippocrates, 108, 156
Hobbes, Thomas, 92, 156
Homer, 156
Hooker, Richard, 156
Hort, F. J. A., 16
Howard, Claude, 13 note
Howe, John, 139
Hume, David, 91 ff., 123 ff., 136, 156
Hunter, John, 18-25 *passim*

INGLEBY, C. Mansfield, 3
Irving, Edward, 136

JACOBI, F. H., 43
Jotham, 106, 156
Juvenal, 90, 156

KANT, Immanuel, vii, 120, 124, 156, *et passim*
Kepler, Johann, 136, 156
King, William, 139
Kirby, William, 83, 111-112, 156

LAERTIUS, the Biographer, 59
Lamb, Charles, 2
Lancaster, Joseph, 45
Laplace, Pierre Simon, 124, 156
Lavoisier, Antoine L., 124, 156
Lawrence, William, 18-21 *passim*, 25
Leibnitz, G. W. von, 91, 121, 156, 165
Lessing, Gotthold Ephraim, 156
Lloyd, Charles, 1
Lloyd, E. A., 17
Locke, John, 40, 73, 136, 156
Lowes, John Livingston, ix
Lucian, 61
Lully, Raymond, 50 note, 59, 144 note
Luther, Martin, 69 note
Lycurgus, 156

MACILWAIN, George, 18, 21, 48
McVickar, John, xii, 1
Magee, William, 124, 156
Malebranche, Nicolas, 156
Manton, Thomas, 139
Marsh, James, 42 ff.
Mendelssohn, Moses, 68, 82 ff. *passim*, 156
Menippus, 106, 156
Michaelis, J. H., 140
Mill, John Stuart, 13 note, 50
Milton, John, 155
Mirandula, 156
Monro, Alexander, 26
Moon, R. O., 20 note
More, Henry, 156
Morgan, Mr. and Mrs. John, 24, 25
Morley, Edith J., 11 note
Muirhead, J. H., 20 note
Murry, J. Middleton, 2 note

NEIL, Samuel, 39
Newton, Isaac, 156
Nicolson, Marjorie, ix, 43
Nidecker, H., 17 note, 72 note

OGDEN, C. K., 20 note
Onesimus, Author of, 156
Oswald, James, 124, 156
Ovid, 157
Owen, John, 139

PAGE, Mr., surgeon, of Calne, 25
Paine, Thomas, 157
Paley, William, 95, 157
Paul, C. Kegan, 50, 52
Phaedrus, 106, 157
Phocion, 157
Pindar, 107, 157

Plato, 10, 33, 63 ff., 119, 131, 157, *et passim*
Plotinus, 111, 157
Plutarch, 140
Polemo, 157
Politian, 157
Polycletus, 157
Poole, Thomas, 27 ff., 40
Pope, Alexander, 125, 157
Porphyry, 50
Porter, Noah, 16, 30, 44
Powell, A. E. (Mrs. Dodds), 13 note
Priestley, Joseph, 92, 124, 157
Proclus, 59
Ptolemy (Claudius Ptolemæus), 136
Pythagoras, 70, 107, 127, 134, 157

RAMUS, Peter, 50 note, 59
Rathbone, William, 24
Raymond of Sabunde, 14 note
Raysor, Thomas M., ix
Réaumur, René de, 111, 157
Reid, Thomas, 124, 136, 157
Reynolds, John, 139
Richards, I. A., 20 note
Richter, Helene, 36 note
Robertson, William, 138
Robinson, H. Crabb, 11 note
Roscoe, William, 24
Rousseau, Jean Jacques, 30
Ruhnkenius, David, 157

SANDFORD, Mrs. Henry, 29 note
Saumarez, Richard, 24
Scheele, Karl Wilhelm, 157
Schelling, F. W. J. von, 80, 157
Schlegel, A. W. von, 43
Scott, Fred Newton, ix
Scott, Inez G., viii
Scott, Walter, 46, 107
Shakespeare, 34, 110, 155, 157
Sharp, Richard, 27
Simmias, the Theban, 63
Simon, John, 44
Socrates, 63
Sophocles, 110
Southey, Robert, 12, 27, 35
Spence, William, 83, 111-112, 157
Spenser, Edmund, 157
Speucippus, 157
Spinoza, Benedict de, 129, 157, 165
Stanley, Edward, 16, 25
Stanley, Thomas, 157
Steele, Richard, 115, 157
Stephanus, the Lexicographer, 137
Sterling, John, 3 note, 9
Sterne, Laurence, 157
Stewart, Dugald, 136
Stirling, James Hutchison, 20 note
Stokoe, F. W., 13 note
Stuart, Daniel, xiii, 71
Stuart, Mary, xiii
Stutfield, Charles, 66, 71, 72

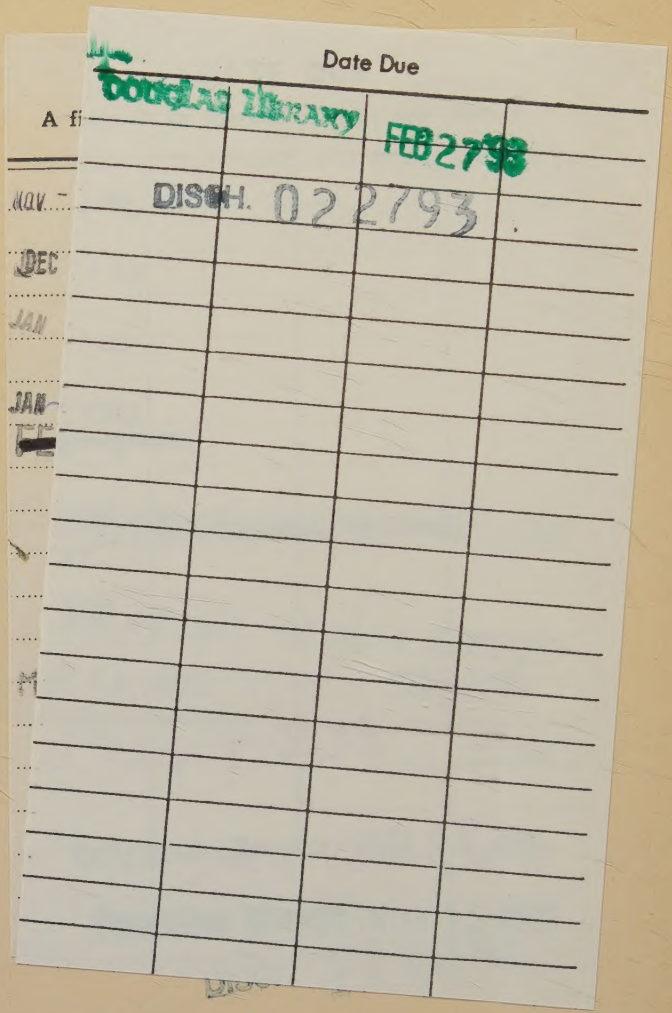
TANNAI, 63
Taylor, Jeremy, 77
Taylor, Nathaniel, 139
Tennemann, W. G., 14 note, 101 note
Thelwall, John, 26
Thompson, Frank T., ix
Thucydides, 107, 138, 157
Timon of Phlius, 63
Towle, G. M., xiii, 34 note, 36
Tucker, Abraham, 157
Turnbull, A., xiii, 13, 50, 52

VIRGIL, 157
Voetius, 157
Voltaire, 157

WARD, C. A., xi, 52, 57, 68
Watson, Mrs. Henry G. (L. E. Gillman), ix, 46 note, 67, 68
Watson, John, 71, 72
Watson, Seth B., xii, 16
Watts, Isaac, 104, 157
Whately, Richard, 39
Wise, Thomas J., ix, 34 note, 38 note
Wissowatius, 157
Wolff, C. von, xi-xii, 73, 157, 158 ff.
Wollaston, W. H., 157
Wylie, Laura Johnson, vii, ix

XENOCRATES, 64
Xenophon, 63

ZENO of Elea, 59 ff., 64, 129


Date Due
DOUGLAS LIBRARY
FEB 27 93
DISCH. 022793

BC 71. C6C. 2

3 9004 02739594 3